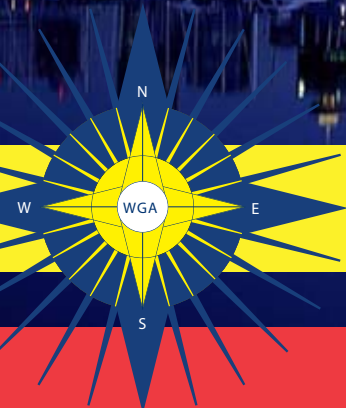


# FINAL PROGRAM

## 5th WORLD GLAUCOMA CONGRESS VANCOUVER JULY 17 - 20, 2013



WORLD GLAUCOMA ASSOCIATION  
**The Global Glaucoma Network**

ORGANIZED BY THGF

[WWW.WORLDGLAUCOMA.ORG](http://WWW.WORLDGLAUCOMA.ORG)



**Santen**

***Tapros  
Taflotan  
and the next...***

**WGC VANCOUVER 2013  
Please visit  
Santen booth #400**

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Tapros® is marketed and Tapros® mini is approved for marketing in Japan.  
Taflotan® is marketed in some countries in Asia and Europe.  
Please ask us for more information.

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## **Useful telephone numbers**

Poster Desk: +1 778-331-7631  
Registration Desk: +1 778-331-7632  
Faculty Desk: +1 778-331-7633  
Speaker Ready Room: +1 778-331-7634  
Hotel Desk: +1 604-230-4386

## **Disclaimer**

The World Glaucoma Association organizes the World Glaucoma Congress with the aim of providing education and scientific discourse in the field of glaucoma. The WGA accepts no responsibility for any products, presentations, opinions, statements or positions expressed by speakers at the congress. Inclusion of material in the scientific program does not contribute an endorsement by WGA.

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# WELCOME BY THE PRESIDENT OF THE WGA



Dear Colleagues,

It is my pleasure to welcome you to the 5th World Glaucoma Congress in Vancouver on July 17-20. This meeting summarizes new insights in glaucoma research as well as current knowledge of patient care. The organizing and program committees developed an outstanding program supported by subcommittees and symposiums chairmen as well as patient organizations who contributed significantly to the details of the program. We are happy to host all national and regional glaucoma societies of the world on the occasion of this meeting. We are pleased to have over 2000 pre-registered attendees for the largest and most comprehensive glaucoma congress worldwide. I am grateful to all who will contribute with symposiums, courses, scientific sessions, poster sessions and grand rounds which comprise all aspects of glaucoma epidemiology, diagnosis and therapy.

In Vancouver we convene in an outstanding location at the pacific coast of Canada with a vibrant life and magnificent scenery. This atmosphere will add to our feeling of being a worldwide family of glaucoma specialists having the opportunity to network and deepen personal friendship.

We hope that you will both enjoy the scientific and educational as well as the local attractions of this meeting. Thank you very much for joining us at the 5th World Glaucoma Congress in Vancouver.

Franz Grehn



## **WELCOME BY** THE EXECUTIVE VICE PRESIDENT OF THE WGA

The World Glaucoma Congress is a major educational initiative of the World Glaucoma Association. We could not assemble this ambitious program without the tremendous volunteer efforts of many people. Our deepest gratitude goes to the program co-chairs, our Organizing Committee, Local Organizing Committee and Program Committee for their dedication over the past year. Our program would not exist without the contributions of the moderators, course organizers, and faculty. Thank you. Behind the scenes, our Congress Organizers, MCI, have been managing the myriad details necessary to coordinate the logistics. We hope you will enjoy the 5th World Glaucoma Congress. Welcome.

Robert D. Fechtner



## **WELCOME BY** THE LOCAL ORGANIZING COMMITTEE

Dear Colleagues,

On behalf of the Local Organizing Committee, it is my pleasure to welcome you to the breathtaking city of Vancouver for the 5th World Glaucoma Congress. An outstanding faculty of internationally regarded experts has been assembled for this extraordinary educational event. We come together to learn the latest in scientific advancements, medical management, and cutting edge surgical approaches to care for our glaucoma patients. It is a unique opportunity to connect with dear friends and colleagues from around the world, and to learn and share ideas in an environment that fosters creative and new exciting collaborations in the field.

We sincerely hope that you will find the meeting stimulating, highly informative, and personally very rewarding.

Warm regards,

Neeru Gupta  
President of the Canadian Glaucoma Society

# WELCOME BY

## THE PROGRAM COMMITTEE



Dear Colleagues and Friends,

The 5th World Glaucoma Congress Program Committee welcomes you to Vancouver! Together with our colleagues of the World Glaucoma Association, the Program Committee has worked hard to develop an innovative and comprehensive scientific program. The program contains a variety of educational events: Symposia on key issues in glaucoma management and research today, Grand Rounds in medical and surgical case management, "What's Hot" in the field of Glaucoma, breakfast, lunchtime and afternoon Industry sponsored symposia, surgical video presentations, and a wide variety of courses on important practical clinical issues given by leading experts. There will be a full day educational track devoted to surgery and another devoted to childhood glaucoma. Over 700 scientific posters are accepted for presentation.

For this meeting, our Canadian colleagues have also organized unique sessions for our opening symposium, and over 20 regional and national glaucoma societies have organized separate satellite symposia open to all participants as well.

We would like to thank all of our colleagues and friends who helped us along the way to make this meeting a huge success: the WGA Board of Governors, WGA President Franz Grehn, Executive Vice President Robert D. Fechtner, the Canadian Glaucoma Society, the Organizing Committee, the Scientific Review Committees, collaborating societies, and most of all - our Faculty, speakers, colleagues, participants and audience.

We all wish you a very enjoyable and fruitful four days of learning and fun here in Vancouver.

Jonathan Crowston  
Neeru Gupta  
Fabian Lerner  
Tarek Shaarawy

# WGC-2013 COMMITTEES

## **Board of Governors:**

M. Araie, R.D. Fechtner, J. Ge, I. Goldberg, F. Grehn, D. Grigera, R.A. Hitchings, D. Lam, F. Lerner, J. Liebmann, K. Martin, G.C. Sekhar, K. Singh, R. Susanna, C.E. Traverso, R.N. Weinreb

## **Organizing Committee:**

I. Goldberg, M. Araie, R. Susanna, R.N. Weinreb, R.A. Hitchings, R.D. Fechtner, K. Martin, K. Singh, D. Lam, J. Liebmann, J. Schuman, S. Melamed

## **Program Committee:**

J. Crowston (co-chair), N. Gupta (co-chair), F. Lerner (co-chair), T. Shaarawy (co-chair), M. Aihara, O. Albis, E. Ancker, B. Ang, A. Anton, T. Aung, A. Azuara-Blanco, K. Barton, K. Ben Amor, S. Bhartiya, D. Broadway, C.F. Burgoyne, G.C. Sekhar, F. Cordeiro, R. Covar, T. Dada, P. Denis, S.K. Fang, J.G. Feijoo, D. Friedman, D. Gatton, J. Ge, R. George, D. Grigera, F. Grus, M. Hangai, P. Harasymowicz, M. He, P. Healey, M. Irkeç, I. Januleviciene, J. Jonas, K. Kashiwagi, A. Khouri, T-W. Kim, D. Leung, C. Leung, H. Levkovitch Verbin, N. Loewen, E. Maul, S. Mosaed, M. Nardi, M. Nassar, A. Ouertani, K-H. Park, J. Piltz-Seymour, T. Realini, L. Sakata, P. Schlottmann, J. Serle, A. Sit, I. Tavares, F. Topouzis, C.E. Traverso, N. Wang, T. Wells, T. Wong

## **Local Organizing Committee:**

A. Crichton (co-chair), F. Mikelberg (co-chair), M. Nicolela (co-chair), I. Ahmed, Y. Buys, C. Hutnik, G. Li, J. Martow, P. Rafuse, J. Taylor

## **Film Festival Committee:**

D. Lam (chair), P. Healey, S.K. Fang, K.H. Park, J. Jonas

## **Grand Rounds Committee:**

J. Piltz-Seymour (Chair), J. Schuman (Chair), C. Melamed, C. Leung, N. Loewen, G. Hollo

## **Travel Grant Selection Committee:**

G.C. Sekhar, K. Kashiwagi, A. Khouri, M. Nardi, D. Grigera, T. Wells, K-H. Park, T. Dada, D. Leung



# THE WORLD GLAUCOMA CONGRESS

## Objectives

- To present new developments in Diagnosis and Therapy of Glaucoma to both the glaucoma expert and the general ophthalmologist interested in glaucoma.
- To enhance communication about glaucoma among ophthalmologists from all over the world.
- To enhance exchange of knowledge between the general ophthalmologist and glaucoma experts.
- To maintain high scientific and ethical standards.

## Special Features

- Largest Glaucoma Congress
- Highly appreciated didactic program
- Top-quality glaucoma experts
- Extensive course program at all levels
- Basic and Clinical Science Sessions
- Special topic discussion symposiums
- Grants for economically underprivileged colleagues
- Grand rounds
- Surgical Day sessions
- Childhood Glaucoma track
- Scientific poster presentations
- Film Festival
- Content Capturing/Enduring Materials

## The Social Part

- Vancouver is a beautiful city with a green environment. A special tours and excursion program is offered to delegates and spouses.
- Welcome Networking Reception will be held at the Vancouver Convention Centre, with stunning river and mountain views.
- The WGC-2013 Congress Dinner will be held at the fabulous Vancouver Aquarium where participants can watch the sea life, whilst mingling and enjoying food and drinks.

# GENERAL MEETING INFORMATION

*In 2007, the organizers of the World Glaucoma Congress and the organizers of the International Glaucoma Symposium decided that it was in the interest of worldwide glaucoma to merge the two meeting into one large glaucoma meeting: the one and only World Glaucoma Congress.*

## **Venue**

Vancouver Convention Centre  
1055 Canada Place  
Vancouver  
BC V6C 0C3  
Canada  
W: [www.vancouverconventioncentre.com](http://www.vancouverconventioncentre.com)

## **WGA Executive Office**

### **Corresponding address:**

Jan van Goyenkade 11  
1075 HP Amsterdam  
The Netherlands  
T: +31 20 679 34 11  
F: +31 20 673 73 06  
E: [info@worldglaucoma.org](mailto:info@worldglaucoma.org)  
W: [www.worldglaucoma.org](http://www.worldglaucoma.org)

## **Congress Organizer**

MCI Amsterdam  
Jan van Goyenkade 11  
1075 HP Amsterdam  
The Netherlands  
T: +31 20 679 34 11  
F: +31 20 673 73 06  
E: [wgc-2013-info@mci-group.com](mailto:wgc-2013-info@mci-group.com)  
W: [www.mci-group.com](http://www.mci-group.com)



## Registration desk - opening hours:

The registration desk located on the first floor of the congress centre will be open for registration and information according to the following time table:

Tuesday, July 16	2.00 pm	- 6.00 pm
Wednesday, July 17	7.00 am	- 6.30 pm
Thursday, July 18	6.30 am	- 6.30 pm
Friday, July 19	6.30 am	- 6.30 pm
Saturday, July 20	7.00 am	- 1.00 pm

## Onsite Congress Registration fees

Participants	CAD\$ 880
Reduced**	CAD\$ 790
Students, Physicians & Scientists in Training*	CAD\$ 200
Accompanying Persons	CAD\$ 150
Congress Dinner	CAD\$ 65

\* Proof of status is required upon registration; otherwise the regular fee will be applied.

\*\* Glaucoma Society member - organizing society symposium.

## Registration Fee includes:

- Attendance to all Scientific and Poster Sessions
- Opening Ceremony and Welcome Reception
- Access to Industrial Exhibition
- Congress Bag
- Abstract E-Book
- Certificate of Attendance
- Online Enduring Materials after the Congress

## Accompanying Persons Fee includes:

- Opening Ceremony
- Welcome Reception
- Half day City Tour and Grouse Mountain

Please note that the Accompanying Persons Fee does not entitle anyone to attend the Scientific Sessions.

## Hotel Reservations

For any enquiries on hotel reservations, please approach MCI Hotel Desk staff at the hotel reservation desk in the Registration Area.

## Cancellation and Refunds

We kindly remind you that cancellations of registrations, hotel reservations and social events were accepted only until March 31, 2013. In case of cancellation within the above-mentioned deadline, applied in writing to the Congress Organizer, the paid amount is refunded with a deduction of CAD\$50 for administrative charges for each cancellation. No refunds are processed for cancellations received after March 31, 2013. For more information, please refer to the Registration Desk. In the event of no-show without any written notice, MCI reserves the right to cancel the hotel reservation. No-shows cannot be refunded. Any authorized refund will be made only after the end of the congress.

**Badges**

All participants and accompanying persons will receive a personal badge upon registration. You are kindly requested to wear your name badge when attending any scientific session or social gathering. Only participants who are wearing their name badge will be admitted to the meeting rooms. You should also wear your badge in the Exhibition area.

Please note: accompanying persons and exhibitors will not be admitted to the scientific sessions. Accompanying persons do have free access to the exhibition.

Name badges have been color-coded as follows:

Red: Faculty

Blue: Participants

Green: Accompanying person

Yellow: Exhibitor

Purple: Press

The charge for replacement of lost badges will be CAD\$25.

**Certificate of Attendance**

The Certificate of Attendance will be available at the WGA booth where you can print this at the self-service stations, after completing the questionnaire and calculating your learning hours.

**Insurance, Liabilities**

Neither the World Glaucoma Association, nor The Hippocrates Glaucoma Society nor the Organizers can be held responsible for any personal injury, loss, damage, accident to private property or additional expenses incurred as a result of delays or changes in air, rail, sea, road, or other services, strikes, sickness, weather, acts of terrorism and any other cause. All participants are encouraged to make their own arrangements for health and travel insurance.

**Technical Exhibition**

An extensive exhibition of pharmaceutical, technical and research products, equipment, books, journals, services, non-profit organizations, etc. is organized in conjunction with the World Glaucoma Congress. The scientific program will allow participants ample time to visit the exhibits.

The exhibition area, located in the exhibit hall will be open at the following hours:

Thursday, July 18	9.30 am	- 6.00 pm
Friday, July 19	9.30 am	- 6.00 pm
Saturday, July 20	9.30 am	- 1.00 pm

## Catering Facilities

Coffee stations and lunch will be provided to congress registrants, but lunches are included only for participants to industry satellite symposiums held on Thursday and Friday in the Ballroom. Vouchers will be given at the end of the lunch symposium at 1pm. A bar serving coffee and snacks (at your own expense) is available in the exhibit hall.

## Program Changes

Actual program changes will be indicated on the screens next to the lecture rooms, as well as the program in the congress app.

The organizers cannot assume liability for any changes in the program due to external or unforeseen circumstances.

## Lost and Found

A lost and found is located at the registration desk.

## Cloakroom and Luggage

In the cloakroom you can leave your belongings. The cloakroom is located near the registration desk and will be available according to the following time table:

Tuesday July 16	1.00 pm	- 6.30 pm
Wednesday, July 17	7.00 am	- 8.00 pm
Thursday, July 18	6.30 am	- 7.30 pm
Friday, July 19	6.30 am	- 6.30 pm
Saturday, July 20	7.00 am	- 1.00 pm

## Personal Data Scanning

Participants may be asked by staff from industries at exhibit booths to provide their personal contact data through bar-code scanning. This way, companies will obtain information about name, surname, country and e-mail address, on an individual, voluntary basis. Please do not allow scanning of your badge by industry representatives if you don't agree. Neither the WGA nor MCI will release your data to other individuals, companies, or institutions, but they will be used only for WGA communication and updates.

## WGA-Run for glaucoma

WGA goes sportive! For the first time in WGC history, there will be a 5K run organized on **Friday, July 19 at 6.00 am**. Be active and join the group of sporty glaucoma runners and sign up! The flat 5K course starts and finishes at the Vancouver Convention Centre. It takes you through beautiful downtown Vancouver on the riverside, into Stanley Park. WGA-Running shirts are available complimentary for pre-registered participants signed up for the WGA-run at the registration desks. We look forward to your participation.



# WGC-2013 GOES ONLINE

## Internet Access

Wireless internet is offered complimentary to all delegates.

Please use the following network:

Network name: WGC-2013

No password required



An Internet Corner is available in the Exhibition Area.

## Online Abstract E-Book

For the first time the abstract book is not offered in print but in E-book format.

Please go to the congress website to download the E-book including all poster abstracts, grand round and film festival abstracts and faculty information.

## Mobile App

WGA is proud that during the 5th WGC there is a tailor-made WGC app available for all delegates. Please go to <http://eventapp.ca/11373> to access the app with program information, floor plans and lots of more information.



## QR Code - Faculty Bio's and photos

If you have a QR reader on your mobile phone, please scan the following code and you will be directed to the Faculty Bio's and photos.

## Enduring materials

The 5th World Glaucoma Congress is proudly presenting enduring materials by capturing the following sessions in video format:



**The following WGC-2013 sessions will be video-captured:**

### Thursday, July 18

8.00 - 9.30 am	<b>Room Ballroom AB</b> S01 Unmet needs in glaucoma
8.00 - 9.30 am	<b>Room 211-214</b> S04 Novel diagnostic targets in glaucoma
10.00 - 11.30 am	<b>Room Ballroom AB</b> S06 Current controversies in glaucoma (Debate)
10.00 - 11.30 am	<b>Room 211-214</b> S09 Angle closure glaucoma

2.00 - 3.30 pm	<b>Room Ballroom AB</b> S12 Advances in functional testing for early detection of glaucoma
2.00 - 3.30 pm	<b>Room 118-120</b> S14 Pediatric glaucoma: Highlights from WGA consensus meeting
2.00 - 3.30 pm	<b>Room 211-214</b> S15 Lifestyle choices for the Glaucoma patient
4.00 - 5.00 pm	<b>Room Ballroom AB</b> C01 Glaucoma drainage devices part 1 - optimizing outcomes
4.00 - 5.00 pm	<b>Room 109-110</b> C02 Evaluation of visual fields
4.00 - 5.00 pm	<b>Room 205-206</b> C08 A new addition to the Glaucoma Management Team - The Patient
5.00 - 6.00 pm	<b>Room Ballroom AB</b> C13 Glaucoma drainage devices - part 2 - advanced techniques
5.00 - 6.00 pm	<b>Room 204</b> C25 New developments in perimetry

## Friday, July 19

8.00 - 9.30 am	<b>Ballroom AB</b> S17 Identifying glaucoma progression
8.00 - 9.30 am	<b>Room 211-214</b> S20 Risk factors for glaucoma onset and progression
10.00 - 11.30 am	<b>Ballroom AB</b> S22 Glaucoma surgery: Complications & rescue operations
10.00 - 11.30 am	<b>Room 211-214</b> S25 Impact of functional impairment from glaucoma, enhancing visual performance in patients with glaucoma
2.00 - 3.30 pm	<b>Room Ballroom AB</b> S27 Glaucoma grand rounds
2.00 - 3.30 pm	<b>Room 211-214</b> S30 Aqueous drainage devices
4.00 - 5.00 pm	<b>Room Ballroom AB</b> C26 Emerging glaucoma surgery - 1 (ab interno) theory and techniques
4.00 - 5.40 pm	<b>Room 109-110</b> C27 Advances in understanding and management of angle closure (in cooperation with APGS)
4.00 - 5.00 pm	<b>Room 211-214</b> C28 Imaging 1: Basic technology and diagnosis
5.00 - 6.00 pm	<b>Room Ballroom AB</b> S33 What is new in glaucoma surgery?

5.00 - 6.00 pm	<b>Room 211-214</b> C36 Imaging 2: Progression and management
5.00 - 6.00 pm	<b>Room 220-222</b> C37 Tips from experts: How to make your trabeculectomy work
5.00 - 6.00 pm	<b>Room 116-117</b> C44 First steps of becoming an effective mentor

## Saturday, July 20

8.00 - 9.30 am	<b>Room Ballroom AB</b> S34 What's hot in glaucoma - Important contributions in the past year
8.00 - 9.30 am	<b>Room 118-120</b> S36 Neuroimaging of glaucoma
10.00 - 11.30 am	<b>Room Ballroom AB</b> S37 Surgical grand rounds: Challenging Glaucoma Cases
10.00 - 11.30 am	<b>Room 118-120</b> S39 Biomarkers in glaucoma



**The following WGC-2013 sessions will be audio-captured:**

## Thursday, July 18

8.00 - 9.30 am	<b>Room 109-110</b> S02 Biomechanics of the eye
10.00 - 11.30 am	<b>Room 109-110</b> S07 Imaging technology advances
2.00 - 3.30 pm	<b>Room 109-110</b> S13 Advances in Glaucoma Genetics
5.00 - 6.00 pm	<b>Room 109-110</b> C14 Decision making after failed trab

## Friday, July 19

8.00 - 9.30 am	<b>Room 109-110</b> S18 Cataract plus: Adding glaucoma surgery
10.00 - 11.30	<b>Room 109-110</b> S23 Challenges of medical therapy
2.00 - 3.30 pm	<b>Room 109-110</b> S28 Epidemiology and screening for glaucoma



## Saturday, July 20

8.00 - 9.30 am	<b>Room 109-110</b> S35 Stem cells and regenerative medicine
10.00 - 11.30 am	<b>Room 109-110</b> S38 Targeting aqueous outflow

*All will be made available after the congress on the online WGA education portal, which will be accessible via [www.worldglaucoma.org](http://www.worldglaucoma.org), as of August 1, 2013.*

### Twitter

WGC-2013 uses #wgc2013 as official congress hashtag. Please follow @WorldGlaucoma to follow all tweets from the congress.



### Website

Please make sure you check-out the congress website at <http://www.worldglaucoma.org/WGC/WGC2013/> with information about all speakers, their bio-statements and photos.

### Way finding Kiosks

All through the convention centre you will find the way finding kiosks for your convenience with session details and room information with directions.

# HOW TO GET AROUND VANCOUVER

## Currency and banking

1 CAD\$ = 100 cents

Banks are generally open from 10.00 am to 4.00 pm, Monday through Friday. Visitors to Canada are encouraged to exchange funds for Canadian dollars at Vancouver International Airport, at a bank or at a foreign currency exchange outlet where they will receive the prevailing rate. Automatic teller machines (ATMs) are found throughout Vancouver. International credit cards are accepted throughout the country and traveler cheques can be changed at banks, hotels, resorts and the airport.

## Climate

The average July temperature in Vancouver is warm and comfortable, mostly sunny during the day, with the possibility of clouds and rain approx: 23°C / 74°F. A light jacket for the evening is suggested as temperatures may cool down.

## Electricity

Canada operates on 110V, 60 cycle electric power, which is the same as in the United States. Non-North American visitors should bring a plug adaptor if they wish to use their own small appliances from home (razors, hair dryers, etc). Canadian electrical goods come with either a two-pronged plug, which is the same as the US, or a three-pronged plug; most sockets accommodate both.

## Public Transport

For a detailed route, schedule and trip planning information for transit throughout Vancouver, visit [www.translink.bc.ca](http://www.translink.bc.ca) or phone 1-604-953-3333. Please note that a bus ticket is valid for 90 minutes. Be sure to utilize the trip planning feature on the Translink website. This feature can assist you with finding the right buses to take you where you need to go.

## Shops

Shops open from 10.00 am to 7.00 pm from Monday to Saturday. Most large stores will also open on Sunday, but generally with shorter opening hours.

## Taxes

Effect of April 1, 2013 GST (or VAT) in British Columbia has returned to a provincial sales tax (PST) system (7%,) and Good Services Tax will be at rate of 5%.

## **Time**

Standard time zone: UTC/GMT -8 hours. Daylight saving time: +1 hour. Vancouver is on PDT (Pacific Daylight Time).

## **Tipping**

Some properties and resort hotels include tips or gratuities with group tours to simplify bookkeeping. This will usually include gratuities for housekeeping, bell service and food service. Otherwise, customary gratuity will be calculated at 15%, which is a base standard tip in most restaurants, bars and hotels.

## **Travel Insurance**

A travel insurance policy to cover theft, loss and medical problems is recommended. The congress organizer will not be held liable for illness, accidents or thefts suffered by participants or accompanying persons during the Congress or their stay in Canada before or after the Congress.

## **What to Wear**

Business casual attire is appropriate for the congress. Men generally wear slacks and dress shirts or polo shirts, often with a jacket. Women generally wear pantsuits, skirts or slacks and blouses/golf shirts. The dress code for the Welcome Reception is business casual. The dress code for the Congress Dinner is smart casual.

## **Show Your Badge – Tourism Vancouver**

*Special delegate offers that will make locals envious*

One of the many perks of being a Vancouver conference delegate is the Show Your Badge program. Admission discounts, complimentary taxis to restaurants, free appetizers, and gifts are just some of the special offers Tourism Vancouver members have set aside for conference attendees in Vancouver. All they have to do is - you guessed it - show their badge. Some offers must be booked in person at Tourism Vancouver's Visitor Centres. Go to the Tourism Vancouver desk to check on the possibilities! The desk is open on:

Wednesday, July 17 – 2.00 pm - 5.00 pm

Thursday, July 18 – 9.00 am - 5.00 pm

Friday, July 19 – 9.00 am - 5.00 pm

Saturday, July 20 – 9.00 am - Noon

# CME CREDITS

The World Glaucoma Congress, July 17-20 2013, meets the requirements for Section 1 Group Learning accreditation as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada. The scientific program is approved by the Canadian Ophthalmological Society for a maximum of 23.25 credits per person. Participants may claim 1 credit hour for each hour of attendance.

Credits for poster viewing: Learning from poster presentations may be claimed as a scanning activity under Section 2, as defined by the RCPSC. You may claim 0.5 credits per poster with a documented learning outcome.

Credits for online education: Fellows of the Royal College of Physicians and Surgeons of Canada may claim Section 2: Self-learning credits for viewing online materials. You may claim 0.5 credits per activity.

## American Medical Association

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to *amA PRA Category 1 Credits™*. Information on the process to convert Royal College MOC credit to amA credit can be found at [www.ama-assn.org/go/internationalcme](http://www.ama-assn.org/go/internationalcme).



## European Union of Medical Specialists

Live educational activities, occurring in Canada, recognized by the Royal College of Physicians and Surgeons of Canada as Accredited Group Learning Activities (Section 1) are deemed by the European Union of Medical Specialists (UEMS) eligible for ECMEC®.

Physicians should only claim credit commensurate with the extent of their participation in the activity.

## How to claim your CME points

If you wish to claim your credits on-site, we kindly invite you to visit the WGA-IGR booth, where WGC staff members will be happy to assist you. A sufficient number of computers are made available to claim your CME credits. Please note you may claim your credits via the WGA website until three months after the closure of the meeting.

## Steps to claim your credit points

- Step 1** Visit [www.worldglaucoma.org](http://www.worldglaucoma.org) and select the **CME** link on the top left side of the page
- Step 2** From the CME home page, select the **claim credits** tab at the top

- Step 3** Enter your personal details. Click **verify** to continue
- Step 4** Answer the general questions regarding the meeting
- Step 5** Click **next** at the bottom of the page to continue to **claim credits › select sessions**
- Step 6** Evaluate the sessions that you have attended from 1 to 10 (10 is the highest score)
- Step 7** Click **next** at the bottom of the page to view your personal account. The system will automatically save your information after you have left the page
- Step 8** To print your CME certificate, please use the print button on the far right side of the table.

For further assistance or more information on CME we kindly invite you to visit the WGA-IGR booth or contact:

Inika Anderson [ianderson@cos-sco.ca](mailto:ianderson@cos-sco.ca)  
 Manager Continuing Professional Development  
 Canadian Ophthalmological Society

## COPE CREDITS

The following sessions have COPE approval, or have been submitted for COPE approval and it is pending.

### **Wednesday July 17 / 8.00 - 9.45 am**

Optometric Glaucoma Society Symposium Normative Databases for Imaging Instrumentation

### **Thursday July 18 / 8.00 - 9.30 am Symposiums**

Biomechanics of the eye

Novel diagnostic targets in glaucoma

### **Thursday July 18 / 4.00 - 5.00 pm Courses**

How to detect and confirm progression and use it to manage glaucoma;

Primary angle closure: Diagnosis & treatment

Normal Tension Glaucoma - a systematic approach

Evaluation of Visual Fields

### **Thursday July 18 / 5.00 - 6.00 pm Courses**

Clinical optic disc evaluation

New Developments in Perimetry

### **Friday July 19 / 8.00 - 9.30 Symposiums**

Risk factors for glaucoma onset and progression

### **Friday July 19 / 4.00 - 5.00 pm Courses**

Generic drugs in glaucoma

Imaging 1: Basic Technology and diagnosis

### **Friday July 19 / 5.00 - 6.00 pm Courses**

Understanding exfoliation syndrome and exfoliation glaucoma

Imaging 2: Progression and management

# SOCIAL PROGRAM

## **Wednesday evening (July 17, 2013, 5.30 - 7.00 pm):**

### **Welcome Reception at the Vancouver Convention Centre**

The Welcome Reception will be held on the foyer deck of Ballroom AB of the Vancouver Convention Centre. This gathering will enable you to meet with your colleagues in the field of Glaucoma from all over the world, while you can enjoy some typical local food and drinks and entertainment.

Included in registration fee for participants, accompanying persons and exhibitors.

## **Thursday evening (July 18, 2013):**

### **Free for National Social Gatherings**

After the industry sponsored symposiums, which will end at 7.00 pm, the WGA has purposely not planned any specific World Glaucoma Congress events. Therefore this evening is for smaller groups of participants to enjoy the numerous restaurants and cultural events in Vancouver.

## **Friday evening (July 19, 2013, 7.30 - 11.30 pm):**

### **Congress Dinner at Vancouver Aquarium**

The Congress Dinner of the World Glaucoma Congress will be held at the fabulous Vancouver Aquarium where participants can watch the sea life, whilst mingling and enjoying food and drinks. A special dolphin and beluga show will be part of the entertainment program. Please do not miss this opportunity! Dress code: Smart casual. Admission: confirmation of participation will be made to pre-registered participants by a voucher, to be found in the congress kit. Entry will not be permitted without the voucher. Onsite tickets will be available only on a first come, first served base via the registration desk and cost CAD\$ 65 per person.

# EXCURSION PROGRAM

*Detailed information on the excursion program can be found below. Full payment in advance is required. Tours will only take place with a minimum number of participants and will be cancelled if the minimum number of participants has not been reached. All tours will depart and return at the Vancouver Convention Centre.*

## CITY TOUR - WHISTLER DAY TRIP

July 18



**Whistler**, one of the rising stars in the league of International Destination Resorts, and one of the proud sites of the **2010 Winter Olympics**, is featured in this scenic day tour. Guests will board a motorcoach and head on their way to one of the most scenic rides in the world. The trip from Vancouver to **Whistler Mountain** is a photographer's paradise.

Traveling by **Lions Bay, Porteau Cove**, towering pines and plunging cliffs, boats bobbing in marinas, rich green isles of **Howe Sound** and the majestic mountain peaks present a panorama of nature's generosity that the guests will long remember. Passing the mining community of **Britannia Beach**, and the logging town of **Squamish**, the tour begins to climb into the **Coastal Mountains**. With the peaks of the rugged **Tantalus Range** watching its progress, the motorcoach winds its way through the **Cheakamus Canyon**, past **Daisy Lake** and **Brandywine Falls** to the alpine resort of **Whistler**.

Here in Whistler, enjoy strolling the sunny **Village** where guests may be happy to simply browse through quaint village shops, walk along forest trails, or just relax and enjoy the mountain scenery. Lunch is provided at the Brewhouse Pub, where guests will receive a **Whistler Sightseeing pass**. You haven't been to Whistler until you've been to **the top of Whistler and Blackcomb Mountains**. The view at 6,000 feet is 360 degrees of stunning beauty any way you look at it. An easy gondola or chairlift ride provides spectacular views all the way to the top. The **gondola** to the top of Whistler Mountain is accessible for everybody. For the more adventurous, venture up Blackcomb Mountain with an **open-air chairlift** experience.

Price: CAD\$ 188 per person (This fee is excluding applicable taxes).  
The Whistler tour departs VCC at 8.30 am, and gets back to VCC at 5.00 pm.

## CITY TOUR - GROUSE MOUNTAIN

July 19



This 4 hour tour commences in world-famous **Stanley Park**, a 1,000 acre peninsula of rain forest only 5 minutes drive from the city centre. Following the winding seawall past picturesque yacht clubs, historic **totem poles** and **the Brockton Point Lighthouse** with its view of the pulsating tidal waters of the **Inner Harbour**, the arch of **the Lions Gate Bridge** frames the snow capped Lions Peaks beyond. Continuing, the group enters the forest at **Prospect Point**, exits at the tidal flats of **English Bay** and arrives at sandy **Sunset Beach**. A quick jaunt across the Lions Gate Bridge takes you to the base of **Grouse Mountain**, where participants board the “**Super Skyride**”. This aerial tramway will whisk the guests up an unforgettable “five minute mile” close to the 4,000 foot peak of Vancouver’s highest mountain. In winter, a skier’s delight, in summer, wooded trails and lakeside walks provide the visitors with a reunion with nature. Here the guests can absorb the spectacular 360 degree view, take in the unique Theatre in the Sky audio visual show “**Born to Fly**” or marvel at the display of quaint tree trunk carvings. The Mountain is also home to a wildlife habitat with two very active **Grizzly Bears**. You will enjoy a drink and pastry above the clouds in one of **Grouse Mountain Chalet’s** rooms offering stunning views of the city and its surrounding mountains and waterways spread out below. Vancouver’s neighborhoods of **Kitsilano** and the elite **Shaughnessy Heights** are explored followed by a brief stop at **Queen Elizabeth Park**. Here, guests stop to savor the floral beauty of a former rock quarry magically converted into sunken gardens.

To conclude, the guests motor through the bustling bazaar in the heart of **Chinatown** and along the brick-paved roads of **Gastown**, the Vancouver of yesteryear, returning to the hotel via the shopping and business districts.

This tour is included in the Accompanying Persons Fee. Separate bookings are available for CAD\$ 96 per person (This fee is excluding applicable taxes). The Grouse Mountain tour departs VCC at 9 am and returns at VCC around 2 pm.



## CITY TOUR - CAPILANO SUSPENSION BRIDGE

July 19



This 4 hour tour commences in world-famous **Stanley Park**, a 1,000 acre peninsula of rain forest only 5 minutes' drive from the city centre. Following the winding seawall past picturesque yacht clubs, historic **totem poles** and the **Brockton Point Lighthouse** with its view of the pulsating tidal waters of the Inner Harbour, the arch of the **Lions Gate Bridge** frames the snow capped **Lions Peaks** beyond. Continuing, the group enters the forest at **Prospect Point**, exits at the tidal flats of **English Bay** and arrives at sandy **Sunset Beach**.

A quick jaunt across the **Lions Gate Bridge** takes you to **Capilano Suspension Bridge**. Guests thrill to walk across the world's longest suspension footbridge swaying 230 feet above the white water in the gorge below. Once across, they have an opportunity to walk with the birds along a connection of seven smaller suspension bridges linked to the trees. The highest bridge here is 90 feet high and towers over guests below. "**Cliffwalk**" is a heart-stopping journey taking you through rainforest vegetation on a series of unobtrusive cantilevered and suspended walkways jutting out from the granite cliff face above **Capilano River** to previously unexplored areas of the park. A coffee and pastry stop is included upon arrival at the attraction Vancouver's neighborhoods of Kitsilano and the elite **Shaughnessy Heights** are explored followed by a brief stop at **Queen Elizabeth Park**. Here, guests stop to savor the floral beauty of a former rock quarry magically converted into sunken gardens.

To conclude, the guests motor through the bustling bazaar in the heart of **Chinatown** and along the brick-paved roads of **Gastown**, the Vancouver of yesteryear, returning to the hotel via the shopping and business districts.

Price: CAD\$ 78 per person (This fee is excluding applicable taxes).

The Capilano Bridge tour departs VCC at 9 am and returns at VCC around 2 pm.

# MAP OF VANCOUVER HOTELS



# LIST OF HOTELS AND NUMBER ON THE MAP

## **Congress Center:**



Vancouver Convention Centre

### **5\*\*\*\*\* Hotels:**

1. Fairmont Pacific Rim
2. Pan Pacific Vancouver
3. Sutton Place Hotel

### **4\*\*\*\* Hotels:**

4. Coast Coal Harbour
5. Delta Vancouver Suites
6. Holiday Inn Hotel & Suites
7. Hyatt Regency Vancouver
8. Metropolitan Hotel Vancouver
9. Renaissance Vancouver Hotel
10. Sheraton Vancouver Wall Centre
11. Westin Bayshore
12. Vancouver Marriott Pinnacle

### **3\*\*\* Hotels:**

13. Best Western Plus Downtown
14. Comfort Inn Downtown
15. Days Inn Vancouver Downtown
16. Rosedale On Robson
17. Sandman Hotel Downtown Vancouver
18. Sandman Suites On Davie

### **2\*\* Hotels:**

19. Empire Landmark Hotel
20. Ramada Limited Downtown

# SCIENTIFIC PROGRAM

- C = Courses
- S = Symposiums
- GR = Grand Rounds
- GS = Glaucoma Society



= video-captured session



= audio-captured session

For descriptions and outlines, we refer to the separate Abstract E-Book.

For an overview of all glaucoma society symposiums, industry symposiums, courses and symposiums, please refer to the **program at a glance** on pages 140 to 148



# SCIENTIFIC PROGRAM OVERVIEW PER DAY

**WEDNESDAY, JULY 17, 2013**  
**GLAUCOMA SOCIETY SYMPOSIUMS**

**WED**

**8.00- 9.45 am**

**Room 211-214**

**American Glaucoma Society Symposium  
Best of the AGS**

*Chairs:*

N. Gupta (Canada), A. Sit (US)

**THU**

8.00 - 8.05

**Introduction**

N. Gupta (Canada), A. Sit (US)

8.05 - 8.13

**Comparing the Rate of Rim Area Change in Eyes with  
Visual Field and Optic  
Disc Endpoints: The Confocal Scanning Laser  
Ophthalmoscopy Ancillary  
Study to the Ocular Hypertension Treatment Study**  
L. Zangwill (US)

**FRI**

8.13 - 8.21

**Deformation of The Non-Human Primate (NHP) Optic  
Nerve Head (ONH) Connective Tissues within 3-D  
Histomorphometric Reconstructions of Moderate and  
Severe Experimental Glaucoma (EG) Eyes.**  
R. Ren (US)

**SAT**

8.21 - 8.29

**A Comparison of Trabeculectomy Surgery Outcomes  
with Mitomycin-C Applied by Intra-Tenon Injection versus  
Sponge Method**  
M. Lim (US)

8.29 - 8.37

**The Ocular Hypertension Treatment Study: Difference  
in the Effect of Long Term IOP Variability on the Risk of  
Developing POAG**  
M. Gordon (US)

8.37 - 8.45

**Reduced Schlemm's Canal Size in Glaucoma Observed by  
Spectral Domain Optical Coherence Tomography**  
L. Kagemann (US)

8.45 - 8.53

**Large and Sustained Blood Pressure Dips Are Associated  
with Visual Field Progression in Normal-Tension  
Glaucoma**  
G. De Moraes (US)

8.53 - 9.01

**Continuous 24-h Intraocular Pressure Patterns in  
Untreated Glaucoma Patients Undergoing a Water  
Drinking Test**  
K. Mansouri (US)

9.01 - 9.09	<b>Using Filtered Forecasting Techniques to Determine Personalized Monitoring Schedules for Patients with Open Angle Glaucoma</b> J. Stein (US)
9.09 - 9.17	<b>Prospective Randomized Study Comparing ExPRESS to Trabeculectomy: 1 Year Results</b> Y. Buys (Canada)
9.17 - 9.25	<b>A Prospective Randomized, Multicenter, Single-masked, Parallel, Dose Ranging (VOYAGER) Study To Compare The Safety And Efficacy Of BOL-303259-X To Latanoprost In Subjects With Open Angle Glaucoma Or Ocular Hypertension</b> R.N. Weinreb (US)
9.25 - 9.45	<b>Wrap up &amp; discussion</b>

<b>8.00 - 9.45 am</b>	<b>Room 210</b> <b>Bangladesh Glaucoma Society Symposium</b> <b>Glaucoma Management Trend in Bangladesh</b> <i>Chairs:</i> S. Maruf Ali (Bangladesh), M. Nazrul Islam (Bangladesh)
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#### **Introduction of Speakers**

S. Maruf Ali, M. Nazrul Islam (Bangladesh)

#### **Role of Glaucoma Societies in Developing Countries**

M. Rahman (Bangladesh)

#### **Quality of Life of Glaucoma patient in the Developing World**

M. Ziaul Karim (Bangladesh)

#### **Managing Glaucoma in Bangladesh**

S. Maruf Ali (Bangladesh)

#### **YAG LPI in Angle Closure Diseases**

H. Rahman (Bangladesh)

#### **Selective Laser Trabeculoplasty (SLT) in Bangladeshi Population**

M. Nazrul Islam (Bangladesh)

#### **Trabeculectomy with Ologen implant- my experience**

S. Mohammad Noman (Bangladesh)

#### **Ahmed Glaucoma Drainage Implant- Modified Technique for Developing Country.**

M.A. Karim (Bangladesh)

#### **Evaluation and Update of Glaucoma Surgery in Bangladesh**

A. Rahman (Bangladesh)

#### **Discussion**

**8.00 - 9.45 am**

**Room 204**

**Bulgarian Glaucoma Society Symposium**

*Chairs:*

N. Petkova (Bulgaria), M. Kostianeva (Bulgaria)

GS1

**Central corneal thickness in patients with pseudo exfoliative glaucoma**

S. Ivanova (Bulgaria)

GS2, P541

**Measurement of top five topographic parameters of the optic disc using Heidelberg retina tomograph II in primary open-angle glaucoma patients in various stages of perimetric changes**

A. Toshev (Bulgaria)

GS3, P531

**Comparison of two retinal nerve fiber layer thickness measurements assessed by optical coherence tomography in primary open-angle glaucoma patients**

K. Petrova (Bulgaria)

GS6

**Long term results of patients with primary open-angle glaucoma after SLT**

D. Kazakova (Bulgaria), B. Petrovski (Bulgaria)

GS4

**Appearance of exfoliation syndrome in the progress of primary open-angle glaucoma-a different way for development of exfoliative glaucoma**

M. Kostianeva (Bulgaria)

GS5

**Trabeculotomy vrs.trabeculectomy in childhood glaucoma in iridocorneal mesodermal dysgenesis (Axenfeld-Rieger) Syndrome**

N. Petkova (Bulgaria)

Abstracts available in E-book.

**WED**

**THU**

**FRI**

**SAT**

**8.00 - 9.45 am**

**Room 121-122**

**Chinese Glaucoma Society Symposium**

**Basic and Clinical Research of Glaucoma in China**

*Chairs:*

J. Ge (China), N. Wang (China), X. Sun (China)

8.00 - 8.05

**Introduction: Current situation of glaucoma in China**

J. Ge (China), N. Wang (China)

8.05 - 8.13

**The Beijing intracranial and intraocular pressure study**

N. Wang (China)

8.13 - 8.21

**New findings of molecular research in glaucoma**

C. Pang (China)

8.21 - 8.29

**Mitochondrial disorder in primary angle glaucoma**

J. Ge (China)

WED

THU

FRI

SAT

8.29 - 8.37	<b>Assessment of Schlemm's canal by Spectral-domain optical coherence tomographic</b> X. Sun (China)
8.37 - 8.45	<b>Appositional angle closure in Chinese patients with primary angle closure and primary angle closure glaucoma after laser peripheral iridotomy</b> L. Wu (China)
8.45 - 8.53	<b>Pirfenidone: a newpostoperative antiscarring agent</b> M. Yu (China)
8.53 - 9.01	<b>Visual pathway damage in glaucoma by MRI</b> H. Zhang (China)
9.01 - 9.09	<b>Retinal vascular geometry and glaucoma</b> R. Wu (China)
9.09 - 9.17	<b>The aptamers bound to the extracellular segment of TGF-β receptor II</b> X. He (China)
9.17 - 9.25	<b>The clinical approaches of glaucomatous optic nerve damage in cases of glaucomatocyclitic crises</b> H. Zhou (China)
9.25 - 9.45	Discussion

8.00 - 9.45 am	<b>Room 109-110</b> <b>European Glaucoma Society Symposium</b> <b>Advances in glaucoma: from diagnosis to treatment</b> <i>Chairs:</i> C.E. Traverso (Italy), F. Topouzis (Greece)  <b>The application of imaging in the clinical routine</b> D. Garway-Heath (UK)
	<b>Is laser replacing drops?</b> A. Hommer (Austria)
	<b>Angle Closure: When to do primary lens extraction?</b> J. Thygesen (Denmark)
	<b>Battle against bleb failure: modulation of wound healing</b> I. Stalmans (Belgium)
	<b>Minimally Invasive Angle Surgery. Is it coming to stay?</b> J. Garcia Feijoo (Spain)

8.00 - 9.45 am	<b>Room 118-120</b> <b>Glaucoma Society of India Symposium</b> <b>Glaucoma care in India: Current realities and Future goals</b> <i>Chairs:</i> J.C. Das (India), S. Kaushik (India), S. Dubey (India)
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	<b>Overview of the problem of Glaucoma in India: How are we different?</b> G.C. Sekhar (India)	
	<b>How can we improve Glaucoma detection in India?</b> L. Vijaya (India)	
	<b>Problems faced in Glaucoma care in the public sector</b> R. Sihota (India)	WED
	<b>Problems faced in Glaucoma care in the private sector</b> P. Vyas (India)	
	<b>Is there a particular 'patient type' who is predisposed to Glaucoma?</b> V. Nangia (India)	THU
	<b>Ethnic differences in glaucoma presentations in India</b> C. Paul (India)	
	<b>Role of imaging modalities for glaucoma management in India</b> B. Nayak (India)	FRI
	<b>What is sustainable - medical management or surgery? Who gets what?</b> R. Ramakrishnan (India)	
	<b>Role of lasers in Glaucoma management in India</b> H. Kumar (India)	SAT
	<b>Role of G.D.D in Indian scenario</b> G. Puthuran (India)	
	<b>Future directions for effective glaucoma management in India</b> S. Pandav (India)	

**8.00 - 9.45 am**

**Room 208-209**

**International Society of Glaucoma Surgery Symposium**

*Chairs:*

M. Sherwood (US) and K. Mansouri (Switzerland)

**Introduction of ISGS by its President**

T. Shaarawy (Switzerland)

**Update on nonpenetrating surgery**

F. Grehn (Germany)

**Update on ab interno approaches**

K Mansouri (Switzerland)

**Is there a role for anti-fibrotics in glaucoma surgery?**

I. Stalmans (Belgium)

**Surgery for low-tension glaucoma**

D. Leung (Hong Kong)

**Challenging cases in glaucoma surgery**

T. Dada (India)

**Surgical management of phacomorphic angle closure**

S. Dorairaj (US)

**Challenging cataracts in glaucoma patients**

R. Paletta Guedes (Brazil)

**Management of Malignant Glaucoma**

H. Rao (India), K Mansouri (Switzerland)

**WED****THU****8.00 - 9.45 am****Room 114-115****Israel Glaucoma Society Symposium***Chairs:*

D. Cotlear (Israel)

8.00 - 8.12

**Anterior chamber bleeding after laser Iridotomy**

S. Gabi (Israel)

8.12 - 8.24

**High Intensity Focused Ultrasound**

C. Daniel (Israel)

8.24 - 8.38

**Quantification of In-vivo Lamina Cribrosa Microstructure - Is There Any Difference Between Healthy and Glaucomatous Eyes?**

W. Gadi (US)

**SAT**

8.38 - 8.50

**Intraocular Pressure Curves of untreated Glaucoma-suspects in Sitting and Side-lying Postitions using the Goldmann Applanation Tonometer**

G. Yoseph (Israel)

8.50 - 9.02

**A case presentation and management of glaucoma: intraocular pressure rise in a diabetic patient**

M. Bodman (US)

9.02 - 9.14

**An Overview of Research done on Inherited Glaucoma in New Zealand Albino Rabbits**

S. ArieH (Israel)

9.14 - 9.26

**Cryo therapy for neovascular and other refractory glaucoma**

M. Zalish (Israel)

9.36 - 9.38

**Ex-press Glaucoma implant versus Ahmed Glaucoma valve implantation - a short term comparative study**

R. Rachmiel (Israel)

9.38 - 9.45

**Discussion****8.00 - 9.45 am****Room 205-206****Japan-Taiwan Glaucoma Society Joint Symposium****Glaucoma associated with myopia***Chairs:*

K. Sugiyama (Japan), C. Liu (Taiwan)

	<b>Myopia as a risk factor for POAG from world epidemiological surveys</b> A. Iwase (Japan)	
	<b>IOP fluctuation in eyes with high myopia</b> Y. Ko (Taiwan)	
	<b>Clinical feature of POAG with myopia</b> K. Sugiyama (Japan)	WED
	<b>Anterior segment parameters and myopic glaucoma</b> Y. Kurimoto (Japan)	
	<b>Glaucomatous optic disc morphometric change in myopia</b> R. Asaoka (Japan)	THU
	<b>Imaging of myopic glaucomatous optic neuropathy</b> M. Hangai (Japan)	
	<b>Indication and choice of surgical procedure in glaucoma associated with myopia</b> D. Lu (Taiwan)	FRI
	<b>The role of biodegradable collagen-glycosaminoglycan matrix in trabeculectomy for myopia</b> H. Chen (Taiwan)	SAT

<b>8.00 - 9.45 am</b>	<b>Room 217-219</b> <b>Korean Glaucoma Society Symposium</b> <b>New findings in Glaucoma</b> <i>Chair:</i> K.H. Park (Korea)
8.00 - 8.15	<b>Effects of Different Sleeping Postures on Intraocular Pressure and Ocular Perfusion Pressure</b> C. Yoo (Korea)
8.15 - 8.30	<b>ONH and Scleral Biomechanics in Glaucoma Pathogenesis: A Complicated Story</b> C. Downs (US)
8.30 - 8.45	<b>Macula as a New Target for Glaucoma Management</b> M. Kook (Korea)
8.45 - 9.00	<b>Differentiation of Parapapillary Atrophy Using SD-OCT</b> T.W. Kim (Korea)
9.00 - 9.15	<b>New Findings in Primary Angle Closure Glaucoma</b> K. Sung (Korea)
9.15 - 9.30	<b>Retinal Ganglion Cells: Bench to Bedside</b> J. Goldberg (US)

**8.00 - 9.45 am**

**Room 202-203**

**Optometric Glaucoma Society Symposium  
Normative Databases for Imaging Instrumentation**



*Chairs:*

B. Gaddie (US), M. Fingeret (US)

**WED**

*Description*

This symposium will discuss the role of normative databases in imaging instrumentation. The construction of databases will be discussed including which individuals should be included, what the eligibility requirements may be and the difficulty in developing one that is pertinent for all population groups.

**THU**

8.00 - 8.10

**Welcome and Opening Remarks**

B. Gaddie (US), M. Fingeret (US)

8.10 - 8.25

**Important Considerations in Glaucoma Imaging Device  
Normative Database Construction and Utilization**

D. Garway-Heath (UK)

8.25 - 8.40

**Comparison between Perimetric and OCT normative  
database construction**

M. Patella (US)

8.40 - 8.55

**Review of normative database for OCTs currently FDA  
approved in the United States**

M. Fingeret (US)

8.55 - 9.10

**Inclusion criteria for an OCT normative database**

C. Johnson (US)

9.10 - 9.25

**What is the normal visual field for the elderly?**

P. Artes (UK)

9.25 - 9.40

**Should we have a normative database based upon  
ethnicity?**

L. Zangwill (US)

9.40 - 9.45

**Summary and Wrap Up**

J. Flanagan (Canada)

**8.00 - 9.15 am**

**Room 220-222**

**Pan-American & Latin American Glaucoma Society Joint  
Symposium**

*Chairs:*

P.A. de Arruda Mello (Brazil), F. Lerner (Argentina)

8.00 - 8.05

**Welcome and introduction**

P.A. de Arruda Mello (Brazil), F. Lerner (Argentina)

8.05 - 8.10

**Case presentation 1**

M. Mousalli (Argentina)

8.10 - 8.15

**Case 1 discussion**

V.P. Costa (Brazil), S. Arango (Colombia), J. Cordoba (Costa Rica)

8.15 - 8.20	<b>Case presentation 2</b> A. Cauti Ramon (Peru)
8.20 - 8.25	<b>Case 2 Discussion</b> J. Casiraghi (Argentina), L. Sakata (Brazil), J. Mura (Chile)
8.25 - 8.30	<b>Case presentation 3</b> M. Mendonca (Brazil)
8.30 - 8.35	<b>Case 3 discussion</b> J. Vieira (Venezuela), P. Bech (Panama), V. Castro (Peru)
8.35 - 8.40	<b>Case presentation 4</b> L. Newball (Colombia)
8.40 - 8.45	<b>Case 4 discussion</b> I. Tavares (Brazil), J. Jiménez-Román (Mexico), D. Grigera (Argentina)
8.45 - 8.50	<b>Case presentation 5</b> E. Cruz (Costa Rica)
8.50 - 8.55	<b>Case 5 discussion</b> F. Millan (Venezuela), R. Pérez Grossman (Peru), F. Gomez Goyeneche (Colombia), I. Negri Aranguren (Argentina)
8.55 - 9.00	<b>Case presentation 6</b> L. Rojas (Venezuela)
9.00 - 9.05	<b>Case 6 discussion</b> G. Barreto Fong (Peru), J.C. Parra (Colombia), M. Moreno Marin (Mexico)
9.05 - 9.10	<b>Case presentation 7</b> F. Valenzuela (Chile)
9.10 - 9.15	<b>Case 7 discussion</b> L. Silva (Venezuela), F. Ventosa (Costa Rica), T. Hernandez, Paredes (Mexico), M.J. Justiniano (Bolivia)

WED

THU

FRI

SAT

8.00 - 9.45 am

Room 207

**Pakistan Glaucoma Association Symposium**  
**Challenging cases in glaucoma management - A**  
**perspective from Pakistan**

*Chairs:*

N. Hafeez Butt (Pakistan), S. Imtiaz Ali (Pakistan)

N. Hafeez Butt (Pakistan)

S. Imtiaz Ali (Pakistan)

P.S. Maher (Pakistan)

M. Afzal Bodla (Pakistan)

**8.00 - 9.45 am**

**Room 116-117**

**Portuguese Glaucoma Society Symposium**

*Chairs:*

M. da Luz Freitas (Portugal), M. Carvalho (Portugal),  
A. Figueiredo (Portugal)

**WED**

8.00 - 8.15

**Glaucoma in Portugal - an overview**

M. Carvalho (Portugal)

8.15 - 8.30

**Impairment of Motion, Color and Achromatic Contrast Pathways in Ocular Hypertension and Glaucoma**

P. Faria (Portugal), M. Raimundo (Portugal), C. Mateus (Portugal),  
A. Reis (Portugal) and M. Castelo-Branco (Portugal)

**THU**

8.30 - 8.45

**Glaucoma Progression Detection with Spectralis Macular Thickness Analysis**

C. Seabra (Portugal)

**FRI**

8.45 - 9.00

**Glaucoma and Vascular Disease**

C. Gonçalves (Portugal), T. Gomes (Portugal)

9.00 - 9.15

**Glaucoma by Night**

A. Figueiredo (Portugal)

9.15 - 9.30

**Managing Glaucoma in Patients With Uveitis**

I. Domingues (Portugal)

**SAT**

9.30 - 9.45

**Discussion**

**10.00 am - 12.00 pm Room Ballroom AB**

**Canadian Glaucoma Society Plenary Symposium**

**Glaucoma mechanisms and management**

*Chairs:*

N. Gupta (Canada), A. Crichton (Canada)

**Lymphatic Outflow**

N. Gupta (Canada)

**How to Detect Progression in Glaucoma**

B.C. Chauhan (Canada)

**Management of Low Tension Glaucoma**

F. Mikelberg (Canada)

**Generic glaucoma therapy considerations**

G. Trope (Canada)

**Laser Therapy for Glaucoma: What have we learned?**

K. Damji (Canada)

**Current Role of Trabeculectomy**

P. Rafuse (Canada)

**New glaucoma stents and shunts: Lessons learned**

P. Harasymowicz (Canada)

## Inter-Professional Model of Glaucoma Care

M. Nicoleta (Canada)

## Vision Care in Canada- Challenges and Opportunities

Y. Buys (Canada)

WED

10.00 am - 5.00 pm Room 210

### WGC Film Festival

*Please see page 92 for the list of videos to be shown.*

THU

1.00 - 2.00 pm BREAK

FRI

2.00 - 3.00 pm Room Ballroom AB

### Global Assembly

*Chairs:*

R.D. Fechtner (US), F. Grehn (Germany)

SAT

2.00 - 2.05

### Opening & Welcome

F. Grehn (Germany)

2.05 - 2.10

### Introduction of new Glaucoma Societies since WGC – 2011

R.Hitchings, (UK)

2.10 - 2.15

### WGA Board of Governors changes

R.D. Fechtner (US)

2.15 - 2.20

### WGA initiatives 2012 / 2013

R.D. Fechtner (US)

2.20 - 2.25

### International Glaucoma Review

R.N. Weinreb (US)

2.50 - 2.30

### World Glaucoma Week

I. Goldberg (Australia)

2.30 - 2.40

### Consensus Update

R.N. Weinreb (US)

2.40 - 2.55

### Planned WGA projects and events

R.D. Fechtner (US)

2.55 - 2.58

### New Business

R.D. Fechtner (US)

2.58 - 3.00

### Summary and concluding remarks

R.D. Fechtner (US)

3.00 - 3.30 pm BREAK

## OPENING SESSION

**3.30 - 5.30 pm      Room Ballroom AB**

3.30 - 4.10

**Welcome and introduction of the WGA President**

R.D. Fechtner (US)

**Welcome by the President of the WGA**

F. Grehn (Germany)

**WGA Awards**

F. Grehn (Germany)

**Welcome by the President of the Canadian Glaucoma Society**

N. Gupta (Canada)

**Welcome by the WGC Program Committee Chairs**

J. Crowston (Australia), N. Gupta (Canada), F. Lerner (Argentina) and T. Shaarawy (Switzerland)

**Welcome by the Board of Governors**

R. Hitchings (UK)

**Welcome by the President of the WGA**

F. Grehn (Germany)

**World Glaucoma Week**

I. Goldberg (Australia)

**International Glaucoma Review Update**

R.N. Weinreb

**WGA Film Festival Awards**

R.D. Fechtner (US)

4.10 - 4.15

**Introduction of Keynote Lecture**

G. Douglas (Canada)

4.15 - 5.00

**My personal 60 year Glaucoma Odyssey**

S. Drance (Canada)

5.00 - 5.15

**Summary and Concluding Comments**

R.D. Fechtner (US)

5.15 - 5.30

**Opening Act: Eagle Song Dancers**



**Keynote Lecture opening session:**

**My personal 60 year Glaucoma Odyssey**

Professor Emeritus Stephen Michael Drance

This Keynote lecture will review the state of glaucoma diagnosis and therapy when Dr Steven Drance started training in 1953 and the changes in which he was involved.

**5.30 - 7.00 pm**

**WELCOME RECEPTION ON FOYER DECK OF THE BALLROOM**





**THURSDAY JULY 18, 2013**  
**CHILDHOOD GLAUCOMA TRACK**

**7.00 - 8.00 am**

**Room 202-203**

**IOP Home monitoring**

*Chairs:*

J.M. Martinez de la Casa (Spain)

**This symposium is sponsored by Icare Finland Oy**

**WED**

**7.00 - 8.00 am**

**Room 114-115**

**MIGS: Bridging basic science for ab interno micro-bypass  
 stent technology**

*Chairs:*

I. Ahmed (Canada), T. Samuelson (US), I. Masood (UK)

**This symposium is sponsored by Glaukos Corporation**

**THU**

**FRI**

**7.00 - 8.00 am**

**Room 111**

**Latin American Glaucoma Society Presidents Meeting  
 Breakfast with the Presidents**  
*(By invitation only)*

**SAT**

**8.00 am - 3.30 pm Room 210**

**WGC Film Festival**

*Please see page 94 for the list of videos to be shown.*

**8.00 - 9.30 am**

**Room Ballroom AB**

**S01 Unmet needs in glaucoma**

*Chairs:*

J. Brandt (US), C. Tham (Hong Kong)



8.00 - 8.05

**Welcome & introduction**

C. Tham (Hong Kong)

8.05 - 8.17

**Addressing the global burden of glaucoma - WHO**

I. Kocur (Switzerland)

8.17 - 8.29

**Tubes or trabs in low resource environments**

P. Palmberg (US)

8.29 - 8.41

**Self-sustaining models of eye care delivery**

G.C. Sekhar (India)

8.41 - 8.53

**Visual rehabilitation strategies**

B. Sabel (Germany)

8.53 - 9.05	<b>Glaucoma progression risk calculators</b> J. Liebmann (US)
9.05 - 9.17	<b>Data portability for our mobile, digital future</b> M. Boland (US)
9.17 - 9.29	<b>Non IOP neuroprotective Treatments</b> F. Cordeiro (UK)

WED

<b>8.00 - 9.30 am</b>	<b>Room 109-110</b> <b>S02 Biomechanics of the eye</b> <i>Chairs:</i> C. Downs (US), J. Jonas (Germany)
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8.00 - 8.15	<b>Anatomic Considerations in optic nerve head biomechanics</b> J. Jonas (Germany)
8.15 - 8.30	<b>3D Lamina cribrosa microarchitecture in human eyes</b> V. Libertiaux (Belgium)
8.30 - 8.45	<b>Optic nerve head biomechanics</b> C. Downs (US)

FRI

8.45 - 9.00	<b>Age and race-related differences in Peripapillary Scleral Stiffness</b> M. Fazio (US)
9.00 - 9.15	<b>Biomechanical Mechanisms of Scleral and Laminar remodeling</b> R. Grytz (Germany)
9.15 - 9.30	<b>Clinical implications of ocular biomechanics research</b> C.F. Burgoyne (US)

SAT

<b>8.00 - 9.30 am</b>	<b>Room 118-120</b> <b>S03 Laser trabeculoplasty for open angle glaucoma</b> <i>Chairs:</i> S. Bhartiya (India), K. Damji (Canada)
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#### Panel 1: Contexts for SLT Therapy

8.00 - 8.10	<b>Health economics of SLT vs. meds &amp; predictors of SLT response</b> C. Hutnik (Canada)
8.10 - 8.20	<b>The ideal SLT patient</b> A. Crichton (Canada)
8.20 - 8.30	<b>Does SLT work in angle closure patients?</b> P. Rojanapongpun (Thailand)
8.30 - 8.45	<b>Discussion</b>

## Panel 2: SLT vs Meds, treatment protocols and complications

8.45 - 8.55	<b>SLT vs. Medical management</b> J. Katz (US)
8.55 - 9.05	<b>Optimum treatment and re-treatment protocols</b> S. Arora (UK)
9.05 - 9.15	<b>Complications of ALT and SLT treatment</b> S. Bhartiya (India)
9.15 - 9.30	<b>Discussion</b>

WED

**8.00 - 9.30 am**      **Room 211-214**  
**S04 Novel diagnostic targets in glaucoma**  
*Chairs:* J. Flanagan (US), C. Leung (Hong Kong), L. Zangwill (US)



THU

8.00 - 8.15	<b>Targeting Multifocal Pupil Perimetry in Glaucoma</b> T. Maddess (Australia)
8.15 - 8.30	<b>Targeting Deep Optic Nerve Structures in Glaucoma</b> C. Leung (Hong Kong)
8.30 - 8.45	<b>Targeting the Lamellar Cribrosa in Glaucoma</b> T.W. Kim (Korea)
8.45 - 9.00	<b>Targeting Novel Imaging Applications in Glaucoma</b> D. Huang (US)
9.00 - 9.15	<b>Targeting Brain Changes in Glaucoma</b> S. Graham (Australia)
9.15 - 9.30	<b>Targeting Gliosis in Glaucoma</b> J. Sivak (Canada)

FRI

SAT

**8.00 - 9.30 am**      **Room 220-222**  
**S05 Associate advisory board: Fixing glaucoma worldwide - Where does the clinician-scientist fit in?**

*Chairs:* S. Chakrabarti (India), T. Dada (India), P. Healey (Australia)

8.00 - 8.12	<b>From research to clinical practice: How to use research into day to day practice</b> R. Parikh (India)
8.12 - 8.24	<b>Cytoskeletal drug as a new possible medicine for glaucoma</b> M. Honjo (Japan)
8.24 - 8.36	<b>Engineering a novel approach to develop a sustained drug delivery solution for Glaucoma</b> T. Wong (Singapore)
8.36 - 8.48	<b>Biomarkers and surrogate endpoints in glaucoma</b> F. Medeiros (US)

8.48 - 9.00	<b>A clinician-scientist's approach to surgical training</b> W. Nolan (UK)
9.00 - 9.12	<b>What is the role of anterior segment imaging in angle closure glaucoma?</b> L. Sakata (Brazil)
9.12 - 9.24	<b>Insights from basic science in the clinics for fixing glaucoma worldwide</b> S. Chakrabarti (India)
9.24 - 9.30	<b>Q&amp;A</b>

WED

THU

**9.30 - 10.00 am BREAK - Exhibition Hall**

FRI

**10.00 - 11.30 am Room Ballroom AB**  
**S06 Current controversies in glaucoma (Debate)**



*Chairs:* R. Sihota (India), K. Singh (US)

SAT

10.00 - 10.15	<b>Is cataract Surgery the best treatment for acute angle closure glaucoma?</b> C. Tham (Hong Kong): Yes R. Thomas (Australia): No
10.15 - 10.30	<b>Is IOP fluctuation an independent risk factor for glaucoma progression?</b> R. Varma (US): Yes A. Sit (US): No
10.30 - 10.45	<b>Will modern optic nerve imaging eventually replace stereo disc photography?</b> J. Schuman (US): Yes G. Spaeth (US): No
10.45 - 11.00	<b>Should laser trabeculoplasty be recommended for first line glaucoma therapy for POAG?</b> J. Katz (US): Yes R. Susanna (Brazil): No
11.00 - 11.15	<b>The best minimally invasive ab interno glaucoma procedure combined with cataract surgery is?</b> R. Fellman (US): Trabecular Ablation N. Pfeiffer (Germany): Intracanalicular stent S. Vold (US): Suprachoroidal stent
11.15 - 11.30	<b>Should IOP be lowered when the only measured abnormality is RNFL thinning on optic nerve imaging</b> F. Medeiros (US): Yes H. Quigley (US): No

**10.00 - 11.30 am Room 109-110****S07 Imaging technology advances**

*Chairs:* R.D. Fechtner (US), A.M. McKendrick (Australia), F. Medeiros (US)

10.15 - 10.30 **Combining structure and function for detection of glaucoma progression**

F. Medeiros (US)

WED

10.15 - 10.30 **Customising mapping between imaging and function**

A.M. McKendrick (Australia)

10.30 - 10.45 **The importance of optic disc margin anatomy for assessment of neuroretinal rim evaluation**

B.C. Chauhan (Canada)

THU

10.45 - 11.00 **Imaging anterior and posterior optic nerve head blood flow**

A. Hafez (Canada)

11.00 - 11.15 **Imaging the lamina cribrosa**

T.W. Kim (Korea)

FRI

11.15 - 11.30 **Potential for in-vivo imaging dying RGCs**

F. Cordeiro (UK)

SAT

**10.00 - 11.30 am Room 118-120****S08 Ocular perfusion pressure, blood flow, and clinical relevance**

*Chairs:* A. Harris (US), F. Topouzis (Greece)

10.00 - 10.13 **Ocular blood flow from evidence-based medicine to the clinic**

A. Harris (US)

10.13 - 10.26 **Ocular perfusion pressure and glaucoma: Evaluating the evidence**

F. Topouzis (Greece)

10.26 - 10.39 **Ocular blood flow and glaucoma: Evaluating the evidence**

V.P. Costa (Brazil)

10.39 - 10.52 **Filling the gaps. From current evidence to bed side**

G.N. Lambrou (Greece)

10.52 - 11.05 **Perspectives in introducing ocular perfusion pressure and ocular blood flow in risk assessment**

J. Liebmann (US)

11.05 - 11.18 **Could glaucoma patients benefit from modifying ocular perfusion pressure and ocular blood flow?**

M.R. Wilson (US)

11.18 - 11.30 **Ocular perfusion pressure and ocular blood flow interrelationship. Current knowledge and clinical relevance**

I. Januleviciene (Lithuania)

**10.00 - 11.30 am Room 211-214**

**S09 Angle closure glaucoma**

*Chairs:* A. Azuara Blanco (UK), M. He (China)



**10.00 - 10.15 Lens extraction for angle-closure glaucoma**

A. Azuara Blanco (UK)

**10.15 - 10.30 Nanophthalmos**

K. Fang Seng (Malaysia)

**10.30 - 10.45 Phaco-trabeculectomy**

P. Chew (Singapore)

**10.45 - 11.00 Challenging cases of angle-closure glaucoma**

W. Nolan (UK)

**11.00 - 11.15 Neovascular glaucoma: current approach**

T. Shaarawy (Switzerland)

**11.15 - 11.30 An overview on the Challenges in management & research of Angle closure Glaucoma**

M. He (China)

**10.00 - 11.30 am Room 220-222**

**S10 Of mice and men: What can animal models teach us about glaucoma?**

*Chairs:* J. Crowston (Australia), S. John (US)

**10.00 - 10.15 Acute IOP injury and what it tells us about glaucoma**

J. Morrison (US)

**10.15 - 10.30 Molecular and cellular responses to chronic IOP elevation in experimental glaucoma**

R. Nickells (US)

**10.30 - 10.45 Monocytes in optic nerve degeneration and protection**

S. John (US)

**10.45 - 11.00 Innovative approaches to retinal imaging in rodents**

J. Lindsey (US)

**11.00 - 11.15 Advances in functional assessments in monkey models**

B. Fortune (US)

**11.15 - 11.30 The ageing optic nerve in monkey glaucoma models**

C.F. Burgoyne (US)

**10.00 - 11.30 am Room 121-122**

**S11 Glaucoma surgery in children**

*Chairs:* A. Abdelrahman (Egypt), F. Grehn (Germany)

10.00 - 10.15	<b>Classification consensus</b> F. Grehn (Germany)
10.15 - 10.30	<b>Overview of surgical management options</b> V. Sung (UK)
10.30 - 10.45	<b>Angle surgery</b> J. Brookes (UK)
10.45 - 11.00	<b>Deep Sclerectomy &amp; Combined techniques</b> A. Abdelrahman (Egypt)
11.00 - 11.15	<b>Tube surgery</b> O. Albis-Donado (Mexico)
11.15 - 11.30	<b>Q&amp;A</b>

WED

THU

**11.30 - 12.00 am BREAK - Foyer Ballroom AB**

FRI

## LUNCH SYMPOSIUMS

12.00 - 1.00 pm	<b>Room 109-110 - Non-US physicians only</b> <b>Key advances in medical and surgical treatments in Glaucoma</b> I. Goldberg (Australia) R. Susanna (Brazil) S. Gandolfi (Italy) T. Shaarawy (Switzerland)
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SAT

**This symposium is sponsored by Alcon Laboratories, Inc**

**11.45 am Room 118-120**  
**Registration**

12.00 - 1.00 pm	<b>Room 118-120 - US physicians only</b> <b>A new treatment for elevated intraocular pressure</b> A. Grajewski (US) J. Schultz (Germany)
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**This symposium is sponsored by Alcon Laboratories, Inc**

**1.00 - 2.00 pm**

**LUNCH and VISIT the Poster Area and Exhibition**

*Please collect your lunchbox voucher at 1 pm  
at the entrance of room 109-110 or room 118-120.*

**WED**

**2.00 - 3.30 pm**

**Room Ballroom AB**

**S12 Advances in functional testing  
for early detection of glaucoma**



*Chairs:*

P. Artes (UK), J. Liebmann (US)

**THU**

2.00 - 2.15

**What is the best strategy to detect early vision damage in glaucoma?**

A. Anton (Spain)

2.15 - 2.30

**How often should patients perform perimetry?**

F. Goñi (Spain)

**FRI**

2.30 - 2.45

**Are there alternatives to static automated perimetry (SAP) in clinical practice and research?**

B.C. Chauhan (Canada)

**SAT**

2.45 - 3.00

**What is the best way to detect early glaucoma functional damage**

G. De Moraes (Brazil)

3.00 - 3.15

**How do contrast sensitivity decline, paracentral loss, and peripheral loss affect patient-important vision outcomes?**

P. Ramulu (US)

3.15 - 3.30

**If the SAP visual field is within normal limits, how should the glaucoma patient with structural damage be followed?**

M. Kook (South- Korea)

**2.00 - 3.30 pm**

**Room 109-110**



**S13 Advances in Glaucoma Genetics**

*Chairs:*

T. Aung (Singapore), D. Mackey (Australia), P. Rojanapongpun (Thailand)

2.00 - 2.12

**Introduction to the International Glaucoma Genetics Consortium**

J. Wiggs (US)

2.12 - 2.24

**Recent advances in POAG genetics**

J. Craig (Australia)

2.24 - 2.36

**What's new in the genetics of angle closure glaucoma?**

T. Aung (Singapore)



2.36 - 2.48	<b>Investigating the genes underlying quantitative traits in glaucoma</b> A. Hewitt (Australia)
2.48 - 3.00	<b>Update on the genetics of PXF</b> M. Hauser (US)
3.00 - 3.12	<b>The genetics of congenital glaucoma</b> M. Ali, (UK)
3.12 - 3.24	<b>Future directions in glaucoma genetics</b> J. Fingert (US)
3.24 - 3.30	<b>Q&amp;A</b>

WED

THU

<b>2.00 - 3.30 pm</b>	<b>Room 118-120</b> <b>S14 Pediatric glaucoma:</b> <b>Highlights from WGA consensus meeting</b> <i>Chairs:</i> A. Grajewski (US), M. Papadopoulos (UK), R.N. Weinreb (US)
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FRI

2.00 - 2.08	<b>Definition, Classification, Differential Diagnosis</b> A. Beck (US)
2.08 - 2.16	<b>Establishing the diagnosis and determining Glaucoma progression</b> J. Brandt (US)
2.16 - 2.24	<b>Genetics</b> R. Jamieson (Australia)
2.24 - 2.32	<b>Medications</b> J. Garcia Feijoo (Spain)
2.32 - 2.40	<b>Surgical Treatment</b> P. Khaw (UK)
2.40 - 2.48	<b>Management of Primary Childhood Glaucoma - PCG, JOAG,</b> J. Brookes (UK)
2.48 - 2.56	<b>Glaucoma associated with Ocular Anomalies</b> E. Hodapp (US)
2.56 - 3.04	<b>Management of Glaucoma associated with systemic disease or syndrome</b> E.J. Maul (Chile)
3.04 - 3.12	<b>Management of Glaucoma associated with acquired conditions</b> J. Grigg (Australia)
3.12 - 3.20	<b>Glaucoma following Cataract Surgery</b> C. Fenerty (UK)
3.20 - 3.30	<b>Q&amp;A</b>

SAT

**2.00 - 3.30 pm**

**Room 211-214**

**S15 Lifestyle choices for the Glaucoma patient**

*Chairs:*

E. Higginbotham (US), R. Hitchings (UK)



2.00 - 2.15

**Social determinants of glaucoma: An overview**

G. Spaeth (US)

2.15 - 2.30

**Lifestyle, nutrition and glaucoma**

L. Pasquale (US)

2.30 - 2.45

**Lessons learned from the LALES**

R. Varma (US)

2.45 - 3.00

**Glaucoma care in India**

R. Thomas (Australia)

3.00 - 3.15

**Vision problems and socioeconomic status: The Canadian perspective**

G. Trope (Canada)

3.15 - 3.30

**Association of lifestyle and IOP in a Japanese population**

K. Kashiwagi (Japan)

**2.00 - 3.30 pm**

**Room 220-222**

**S16 Retinal ganglion and glial cells in health and disease**

*Chairs:*

N. Marsh-Armstrong (US), H. Quigley (US)

2.00 - 2.12

**Purinergic receptors and signaling; A link between ganglion cell death and glial activation in the retina**

R. Nickells (US)

2.12 - 2.24

**Reactive astrocytes in the murine optic nerve**

T. Jakobs (US)

2.24 - 2.36

**Live imaging of early microglia activation presages late neurodegeneration in a model of glaucoma**

M. Vetter (US)

2.36 - 2.48

**Glia-derived proinflammatory cytokines and retinal ganglion cell damage in glaucoma**

A. Di Polo (Canada)

2.48 - 3.00

**Malfunction of the endogenous neuroprotective mechanism in glaucoma**

H. Levkovitch-Verbin (Israel)

3.00 - 3.12

**Manifestations of axonopathy during early stages of experimental glaucoma in non-human primates**

B. Fortune (US)

3.12 - 3.24

**Patterns and characteristics of axonal damage in rodent glaucoma models**

J. Morrison (US)

**3.30 - 4.00 pm**

**BREAK and VISIT the Poster Area and Exhibition**

**4.00 - 5.00 pm**

**Room Ballroom AB**  
**C01 Glaucoma drainage devices part 1 -  
optimizing outcomes**



**WED**

*Chairs:*

O. Albis-Donado (Mexico), R. Feldman (US)

4.00 - 4.15

**How do we get a low IOP with Shunts, Early Flow, Wound  
Modulation and other tricks to get better than average  
IOP results?**

P. Palmberg (US)

**THU**

4.15 - 4.30

**Avoiding tube erosions Long Term results**

O. Albis-Donado (Mexico)

4.30 - 4.45

**Avoiding Late Complications of the Cornea from shunts  
surgical tips early, following the cornea and tube position**

S. Lim (US)

**FRI**

4.45 - 5.00

**GDD what we have learned from kids that we can apply to  
adults**

I. Blieden (US)

**SAT**

**4.00 - 5.00 pm**

**Room 109-110**  
**C02 Evaluation of visual fields**



*Chairs:*

P. Artes (UK), M. Fingeret (US)

4.00 - 4.15

**Introduction to the visual fields**

D. Anderson (US)

4.15 - 4.30

**Systematic assessment of the single visual field printout**

M.G. de la Rosa (Spain)

4.30 - 4.45

**Common artifacts**

P. Artes (UK)

4.45 - 5.00

**Clinical visual field examples**

M. Fingeret (US)

**4.00 - 5.00 pm**

**Room 118-120**  
**C03 Glaucoma therapies and ocular surface diseases**

*Chairs:*

M. Kahook (US), K. Mansouri (Switzerland)

4.00 - 4.12

**A historical perspective on preservative use in ophthalmic  
topical therapeutics**

G. Tomita (Japan)

	4.12 - 4.24	<b>Epidemiology of OSD in Glaucoma Patients</b> A. Khouri (US)
	4.24 - 4.36	<b>Diagnosing OSD in the Glaucoma Patient: Pearls for Practice</b> F. Goñi (Spain)
WED	4.36 - 4.48	<b>Alternative Preservatives: Is IOP lowering compromised without BAK?</b> A. Hommer (Austria)
THU	4.48 - 5.00	<b>Management of ocular surface disease</b> D. Chu (US)
<hr/>		
FRI	4.00 - 5.00 pm	<b>Room 211-214</b> <b>C04 How to detect and confirm progression and use it to manage glaucoma</b> <i>Chairs:</i> R. Mills (US), P. Rafuse (Canada)
SAT	4.00 - 4.15	<b>Progression: Visual fields</b> R. Stamper (US)
	4.15 - 4.30	<b>Progression: Other functional and behavioral testing</b> C. Johnson (US)
	4.30 - 4.45	<b>Progression: Imaging</b> I. Tavares (Brazil)
	4.45 - 5.00	<b>Progression: Rates and patient burden</b> P. Rafuse (Canada)
<hr/>		
	4.00 - 5.00 pm	<b>Room 220-222</b> <b>C05 Diagnosis of Childhood Glaucoma in Infancy</b> <i>Chairs:</i> A. Beck (US), A. Levin (US)
	4.00 - 4.15	<b>CGRN/WGA Classification System</b> A. Grajewski (US)
	4.15 - 4.30	<b>Differential Diagnosis</b> M. Papadopoulos (UK)
	4.30 - 4.45	<b>IOP and Pachymetry</b> T. Chen (US)
	4.45 - 5.00	<b>Examination pearls for Office and EUA</b> J. Brookes (UK)
<hr/>		

**4.00 - 5.00 pm      Room 121-122**  
**C06 Advanced Imaging techniques for anterior chamber & angle evaluation**

*Chairs:* W. Nolan (UK), H. Tanihara (Japan)

4.00 - 4.12      **Overview for quantitative evaluation of AC parameters**  
W. Nolan (UK)

4.12 - 4.24      **Recent devices for anterior ocular segment measurements**  
K. Kashiwagi (Japan)

4.24 - 4.36      **Imaging for angle closure and narrow angle**  
S. Kunimatsu-Sanuki (Japan)

4.36 - 4.48      **Biometric factors related to AC widening and IOP reduction after LI and cataract surgery**  
S. Lin (US)

4.48 - 5.00      **Imaging techniques for the assessment of therapeutic effects of Glaucoma surgery**  
H. Tanihara (Japan)

WED

THU

FRI

**4.00 - 5.00 pm      Room 202-203**  
**C07 Principles of medical therapy in glaucoma practice**

*Chairs:* C. Birt (Canada), G. Hollo (Hungary)

4.00 - 4.15      **Setting target pressure and selection of initial therapy**  
T. Yoshitomi (Japan)

4.15 - 4.30      **Preserved vs. unpreserved medication?**  
S. Asawaphureekorn (Thailand)

4.30 - 4.45      **Combination therapies: fixed or unfixed. Does FCs therapy offer advantage?**  
T. Eke (UK)

4.45 - 5.00      **Compliance - even the best drug will not work if it is not used**  
A. Shrivastava (US)

SAT

**4.00 - 5.00 pm      Room 205-206**  
**C08 A new addition to the Glaucoma Management Team - The Patient**

*Chairs:* I. Goldberg (Australia), R. Ritch (US)

4.00 - 4.12      **Scotoma - The patient perspective and experience**  
J. Lovett (UK)

4.12 - 4.24      **Scotoma Awareness**  
A. Colenbrander (US)



4.24 - 4.36	<b>Psychological aspects of Glaucoma from a psychiatrist and patient's perspective</b> H. Edwards (US)
4.36 - 4.48	<b>Making the patient a partner in therapy</b> I. Goldberg (Australia)
4.48 - 5.00	<b>Providing support for Glaucoma patients - In and outside the office</b> H. Abutiate (Ghana)

WED

THU

<b>4.00 - 5.00 pm</b>	<b>Room 208-209</b> <b>C09 Trabeculectomy pearls and pitfalls</b> <i>Chair:</i> F. Lerner (Argentina), S. Melamed (Israel)
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FRI

4.00 - 4.15	R. Fellman (US)
4.15 - 4.30	E. Blumenthal (Israel)
4.30 - 4.45	P. Khaw (UK)
4.45 - 5.00	J. Serle (US)

SAT

<b>4.00 - 5.00 pm</b>	<b>Room 217-219</b> <b>C10 Expert techniques for small pupils and weak zonules</b> <i>Chairs:</i> I. Ahmed (Canada), M. Coote (Australia)
4.00 - 4.12	<b>Surgical aids and strategies for small pupils and unstable capsules</b> I. Ahmed (Canada)
4.12 - 4.24	<b>Glaucoma and the complicated cataract operation - Surgery before, during or after?</b> M. Coote (Australia)
4.24 - 4.36	<b>Unstable everything - the disaster</b> A. Mermoud (Switzerland)
4.36 - 4.48	<b>The Recovery - ACIOL, Post-fixed IOL, Aphakia - What to do?</b> K. Mori (Japan)
4.48 - 5.00	<b>PXF and the Cataract Surgery</b> P. Harasymowicz (Canada)

<b>4.00 - 5.00 pm</b>	<b>Room 114-115</b> <b>C11 How to design and publish glaucoma studies</b> <i>Chairs:</i> N. Pfeiffer (Germany), M Sherwood (UK)
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4.00 - 4.15	<b>How to design a clinical study of glaucoma</b> S. Mansberger (US)
4.15 - 4.30	<b>How should we investigate quality of life in a glaucoma study?</b> N. Pfeiffer (Germany)
4.30 - 4.45	<b>How should we report glaucoma surgical trials?</b> M. Sherwood (UK)
4.45 - 5.00	<b>What is the journal editor looking for?</b> P. Kaufman (US)

WED

THU

<b>4.00 - 5.00 pm</b>	<b>Room 116-117</b> <b>C12 Normal Tension Glaucoma - a systematic approach</b> <i>Chairs:</i> K.H. Park (Korea), T. Yamamoto (Japan)
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FRI

4.00 - 4.12	<b>Diagnosis of NTG</b> Y. Kurimoto (Japan)
4.12 - 4.24	<b>The Neuro-Ophthalmologic Differential Diagnosis of NTG</b> M. Moster (US)
4.24 - 4.36	<b>Clinical course of NTG</b> S. Kim (Korea)
4.36 - 4.48	<b>Management of NTG</b> T. Yoshitomi (Japan)
4.48 - 5.00	<b>Neuroprotection for NTG</b> L. Levin (US)

SAT

<b>5.00 - 6.00 pm</b>	<b>Room Ballroom AB</b> <b>C13 Glaucoma drainage devices - part 2 - advanced techniques</b> <i>Chairs:</i> J. Freedman (US), M. Sherwood (US)
5.00 - 5.12	<b>Management of Corneal transplants and Glaucoma implants</b> S. Gandolfi (Italy)
5.12 - 5.24	<b>Management of tube exposures</b> J. Jiménez-Román (Mexico)
5.24 - 5.36	<b>Tubes and retinal detachments</b> M. Coote (Australia)
5.36 - 5.48	<b>What to do if first implants fails?</b> M. Sherwood (US)
5.48 - 6.00	<b>Advanced techniques to assist in prevention of bleb fibrosis and failure</b> J. Freedman (US)



**5.00 - 6.00 pm**

**Room 109-110**

**C14 Decision making after failed trab**

*Chair:*

J. Tsai (US)



5.00 - 5.30

**Rescuing the failing Trabeculectomy bleb**

S. Dorairaj (US)

5.30 - 6.00

**Bridge over TRAB'LD waters: Decision making after a Failed Trab**

R. Covar (Australia)

**WED**

**THU**

**5.00 - 6.00 pm**

**Room 118-120**

**C15 Tonometry and corneal biomechanics**

*Chairs:*

J. Brandt (US), D. Grigera (Argentina)

5.00 - 5.15

**CCT, Corneal Biomechanics and Glaucoma risk**

G. Li (Canada)

5.15 - 5.30

**The new tonometers - an update and comparison of new and old devices**

J. Serle (US)

5.30 - 5.45

**Understanding and interpreting IOP data in large clinical trials and in your office**

T. Realini (Italy)

5.45 - 6.00

**24 hour tonometry - an update**

D. Gatton (Israel)

**FRI**

**SAT**

**5.00 - 6.00 pm**

**Room 211-214**

**C16 Cataract surgery and then glaucoma surgery**

*Chairs:*

J. Garcia Feijoo (Spain), F. Grehn (Germany)

5.00 - 5.12

**Combine or sequential surgery**

M. Iester (Italy)

5.12 - 5.24

**Trabeculotomy and Phaco Combine surgery options**

T. Fukuchi (Japan)

5.24 - 5.36

**Phaco in primary angle closure glaucoma**

P. Rojanapongpun (Thailand)

5.36 - 5.48

**Phaco after trabeculectomy?**

A. Azuara Blanco (UK)

5.48 - 6.00

**MIGS combine surgery**

F. Garcia Feijoo (Spain)



<b>5.00 - 6.00 pm</b>	<b>Room 220-222</b>	
	<b>C17 Fundamentals for gonioscopy</b>	
<i>Chairs:</i>	A. Hommer (Austria), J. Schultz (US)	
5.00 - 5.20	<b>Angle Anatomy and glaucoma grading systems</b>	
	J. Piltz-Seymour (US)	
5.20 - 5.40	<b>Gonioscopy techniques (in office and operating room)</b>	
	R. Stamper (US)	
5.40 - 6.00	<b>The role of anterior segment imaging in assessing the angle</b>	
	F. Mikelberg (Canada)	
<hr/>		
<b>5.00 - 6.00 pm</b>	<b>Room 121-122</b>	
	<b>C18 Treatment of congenital and infantile glaucoma</b>	
<i>Chair:</i>	J. Brookes (UK)	
5.00 - 5.20	<b>Treatment of Glaucoma following congenital cataract surgery</b>	
	A. Beck (US)	
5.20 - 5.40	<b>Glaucoma Tube Surgery in Children</b>	
	J. Brookes (UK)	
5.40 - 6.00	<b>Management of primary congenital glaucoma</b>	
	A. Mandal (India)	
<hr/>		
<b>5.00 - 6.00 pm</b>	<b>Room 202-203</b>	
	<b>C19 Emerging glaucoma surgery - 1 (ab externo) theory and techniques</b>	
<i>Chairs:</i>	T. Dada (India), A. Robin (US)	
5.00 - 5.12	<b>Glaucoma Surgery: When to do, what are the targets and how does it work?</b>	
	A. Robin (US)	
5.12 - 5.24	<b>Trabeculectomy is still the Golden standard but can we improve outcomes?</b>	
	T. Dada (India)	
5.24 - 5.36	<b>The role of ExPress device in current glaucoma practice</b>	
	A. Khouri (US)	
5.36 - 5.48	<b>Ab-Externo surgery today - is there a place for non-penetrating glaucoma surgery and suprachoroidal implants?</b>	
	S. Vold (US)	
<hr/>		

WED

THU

FRI

SAT

5.48 - 6.00

**An individualized approach to Ab-Externo glaucoma surgery**  
 T. Samuelson (US)

WED	5.00 - 6.00 pm	<b>Room 205-206</b> <b>C20 Understanding the genetic basis of glaucoma</b> <i>Chairs:</i> J. Craig (Australia), J. Wiggs (US)
THU	5.00 - 5.05	<b>Overview</b> J. Wiggs (US)
	5.05 - 5.12	<b>Clin Family History</b> P. Healey (Australia)
FRI	5.12 - 5.19	<b>Congenital Glaucoma</b> S. Chakrabarti (India)
	5.19 - 5.26	<b>POAG</b> J. Craig (Australia)
	5.26 - 5.33	<b>NTG</b> J. Fingert (US)
SAT	5.33 - 5.40	<b>Pseudoexfoliation</b> L. Pasquale (US)
	5.40 - 5.47	<b>Angle closure</b> C. Pang (Hong Kong)
	5.47 - 5.54	<b>Animal Models</b> T. Borrás (US)
	5.54 - 6.00	<b>Q&amp;A</b>

**5.00 - 6.00 pm**
**Room 208-209**  
**C21 Glaucoma and myopia**  
*Chairs:* J. Jonas (Germany), K. Singh (US)

5.00 - 5.13
 **Introduction to assessment of the highly myopic optic nerve**  
 M. Hangai (Japan)

5.13 - 5.26
 **Anatomic background of biomechanical considerations on the highly myopic nerve head**  
 J. Jonas (Germany)

5.26 - 5.39
 **Epidemiology of myopia and glaucoma**  
 M. He (China)

5.39 - 5.52
 **Therapy for glaucoma in myopic eyes**  
 S. Lin (US)

5.52 - 6.00
 **Panel discussion**

<b>5.00 - 6.00 pm</b>	<b>Room 217-219</b>	
<i>Chairs:</i>	<b>C22 Laser surgery for OAG</b>	
	N.M. Aquino (Philippines), S. Lim (US)	
5.00 - 5.15	<b>Argon Laser Trabeculoplasty (ALT)</b>	
	J.W. Jeoung (Korea)	
5.15 - 5.30	<b>Selective Laser Trabeculoplasty (SLT)</b>	
	S. Lim (US)	
5.30 - 5.45	<b>Endoscopic and External Ciliary Ablation</b>	
	J. Myers (US)	
5.45 - 6.00	<b>Laser-based Filtration Procedures</b>	
	N.M. Aquino (Philippines)	
<hr/>		
<b>5.00 - 6.00 pm</b>	<b>Room 114-115</b>	
<i>Chairs:</i>	<b>C23 Clinical optic disc evaluation</b>	
	J. Crowston (Australia), R. Susanna (Brazil)	
5.00 - 5.12	<b>Introduction to teaching optic disc evaluation in Glaucoma</b>	
	R. Susanna (Brazil)	
5.12 - 5.24	<b>Available resources for learning optic disc examination for Glaucoma</b>	
	W.L. Barboza (Brazil)	
5.24 - 5.36	<b>Acquired optic neuropathies that can be mistaken for Glaucoma</b>	
	M. Moster (US)	
5.36 - 5.48	<b>Inherited optic neuropathies that can be mistaken for Glaucoma</b>	
	L. Levin (US)	
5.48 - 6.00	<b>Internet-based benchmarking of optic disc examination</b>	
	J. Crowston (Australia)	
<hr/>		
<b>5.00 - 6.00 pm</b>	<b>Room 116-117</b>	
<i>Chairs:</i>	<b>C24 Clinicals trials and evidence-based glaucoma</b>	
	D. Anderson (US), S. Mansberger (US)	
5.00 - 5.20	<b>New evidence on fixed combination therapy</b>	
	A. Konstas (Greece)	
5.20 - 5.40	<b>Lasers in Evidence-based Glaucoma therapy</b>	
	P. Schlottmann (UK)	
5.40 - 6.00	<b>RCT evidence for differing for surgical treatments for Glaucoma</b>	
	J. Thygesen (Denmark)	
<hr/>		

WED

THU

FRI

SAT

**5.00 - 6.00 pm**

**Room 204**

**C25 New developments in perimetry**

*Chairs:*

M. Fingeret (US), J. Flanagan (US)



5.00 - 5.15

**Is there still a role for FDT and SWAP?**

C. Johnson (US)

5.15 - 5.30

**Trend analysis and its role in progression detection**

N. Strouthidis (UK)

5.30 - 5.45

**Combining structure and function**

M. Patella (US)

5.45 - 6.00

**New Perimetric testing devices**

J. Flanagan (US)

**WED**

**THU**

**FRI**

**6.00 - 7.00 pm**

**Room 109-110**

**Glaucoma Filtration Surgery: Limiting Variables and Improving Outcomes**

*Chairs:*

I. Goldberg (Australia), K. Singh (US)

**SAT**

6.00 - 6.05

**Welcome and introductions**

K. Singh (US)

6.05 - 6.15

**The case for Glaucoma Filtering Surgery**

S. Gandolfi (Italy)

6.15 - 6.25

**Shortening a short learning Curve in Glaucoma surgery**

T. Shaarawy (Switzerland)

6.25 - 6.35

**Hot Topics in the science of Glaucoma Surgery**

C.E. Traverso (Italy)

6.35 - 6.45

**Eliminating the Variables in Glaucoma Filtering Surgery: Introducing Lumenal Control**

T. Samuelson (US)

6.45 - 6.55

**Tips, Tricks and Pearls for optimizing your Glaucoma filtering Surgery**

M. Moster (US)

6.55 - 7.00

**Putting it all together**

I. Goldberg (Australia)

**This symposium is sponsored by Alcon Laboratories, Inc**

**6.00 - 7.00 pm**

**Room 121-122**

**UC3: A progress report**

*Chair:*

R.N. Weinreb (US)

T. Shaarawy (Switzerland)

F. Aptel (France)

L. Au (UK)

S. Melamed (Israel)

WED

**This symposium is sponsored by EyeTechCare**

THU

**6.00 - 7.00 pm**

**Room 202-203**

**New Horizons: Novel Applications for ologen® Collagen Matrix**

*Chair:*

D. Godfrey (US)

FRI

6.00 - 6.05

**Opening remark**

D. Godfrey (US)

6.05 - 6.15

**The US Experience: ologen® Collagen Matrix in Trabeculectomy**

D. Godfrey (US)

SAT

6.15 - 6.25

**The Ex-Press ologen® Collagen Matrix Technique**

S. Vold (US)

6.25 - 6.35

**Painful Bleb? Revision Surgery and ologen® Collagen Matrix**

R. Fellman (US)

6.35 - 6.45

**Case Report: ologen® Collagen Matrix in Congenital Glaucoma**

N. Hasanova (Azerbaijan)

6.45 - 6.55

**Keys to Success with ologen® Collagen Matrix: trabeculectomy and NPDS**

M. Moussalin (Argentina)

6.55 - 7.00

**Q&A**

**Closing remark**

D. Godfrey (US)

**This symposium is sponsored by Aeon Astron Europe B.V.**


**FRIDAY JULY 19, 2013**  
**SURGERY TRACK**
**6.30 - 7.45 am****Room 116-117****Latin American Breakfast with the Experts***(By invitation only)***WED**

**This symposium is sponsored by Alcon Laboratories, Inc.**

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**7.00 - 8.00 am****Room 121-122****IOP - more than meets the eyes**

R. Ritch (US)

*Chair:***The medical need for 24 hour IOP monitoring**

R. Ritch (US)

**Ocular biomechanics and the pressure-volume relationship**

M. Kahook (US)

**Clinical experience with the SENSIMED Triggerfish**

K. Mansouri (Switzerland)

**Use of the SENSIMED Triggerfish in patients with Angle closure Glaucoma**

T. Aung (Singapore)

**Beyond static levels of IOP: Patterns**

M. Johnstone (US)

**This symposium is sponsored by Sensimed AG**

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**7.00 - 8.00 am****Room 217-219****Paradigm Change in ONH Rim Assessment**

B.C. Chauhan (Canada)

C.F. Burgoyne (US)

**This symposium is sponsored by Heidelberg Engineering GmbH**

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7.00 - 8.00 am

Room 114-115

Haag-Streit Octopus® Breakfast Symposium



**Introduction**

**Pulsar perimetry in the diagnosis of early glaucoma**

C. Johnson (US)

**Comparison of the clinical performance of Octopus® vs. Humphrey progression algorithms**

J. Myers (US)

**Perimetry topic**

P. Artes (Canada)

**This symposium is sponsored by Haag-Streit AG**

WED

THU

FRI

SAT

8.00 - 9.30 am

Room Ballroom AB

**S17 Identifying glaucoma progression**

*Chairs:*

B.C. Chauhan (Canada), D. Garway-Heath (UK)



8.00 - 8.05

**Introduction**

B.C. Chauhan (Canada)

8.05 - 8.20

**Managing the practical aspects of perimetry for detecting progression**

S. Graham (Australia)

8.20 - 8.35

**Importance of changes in the optic nerve head that predict visual field progression**

A. Anton (Spain)

8.35 - 8.50

**Does imaging the retinal nerve fibre layer have a practical role in detecting glaucomatous progression?**

N. Strouthidis (UK)

9.05 - 9.20

**Novel analysis techniques for detecting visual field change,**

C. Bowd (US)

9.20 - 9.30

**Lessons to be learnt about glaucoma progression from clinical trials**

D. Anderson (US)

**8.00 - 9.30 am**

**Room 109-110**

**S18 Cataract plus: Adding glaucoma surgery**

*Chairs:*

Y. Buys (Canada), J. Garcia Feijoo (Spain)



8.00 - 8.15

**WED**

**Weighing the options for the patient with cataract and glaucoma**

J. Taylor (Canada)

8.15 - 8.30

**Comparison of one- versus two-site phacotrabeculectomy: Technique and outcomes**

Y. Buys (Canada)

8.30 - 8.45

**THU**

**Outcomes of phacoemulsification versus phacotrabeculectomy in angle-closure glaucoma**

C. Leung (Hong Kong)

8.45 - 9.00

**Combined cataract and glaucoma drainage implant**

A. Kulkarni (UK)

9.00 - 9.15

**FRI**

**Glaucoma surgical innovation for combined cataract and glaucoma I: Ab interno techniques**

N. Pfeiffer (Germany)

9.15 - 9.30

**SAT**

**Glaucoma surgical innovation for combined cataract and glaucoma II: Ab externo techniques**

M.R. Moster (US)

**8.00 - 9.30 am**

**Room 118-120**

**S19 Exfoliation Syndrome and Exfoliative glaucoma**

*Chairs:*

A. Konstas (Greece), L. Pasquale (US)

8.00 - 8.15

**The ocular burden produced by exfoliation syndrome**

R. Ritch (US)

8.15 - 8.30

**Cataract extraction in exfoliation syndrome**

I. Ahmed (Canada)

8.30 - 8.45

**The association between LOXL1 and exfoliation syndrome worldwide: an update**

D. Mackey (Australia)

8.45 - 9.00

**The histopathology of exfoliation syndrome in the context of the LOXL1 gene expression**

U. Schlötzer-Schrehardt (Germany)

9.00 - 9.15

**Are there environmental risk factors for exfoliation syndrome?**

M. Irkec (Turkey)

9.15 - 9.30

**Can we develop novel drug therapies for exfoliation syndrome?**

G. Hollo (Hungary)



**8.00 - 9.30 am**

**Room 211-214**



**S20 Risk factors for glaucoma onset and progression**

*Chairs:*

D. Friedman (US), C. Hutnik (Canada), P. Rojanapongpun (Thailand)

8.00 - 8.12

**OHTS: Risk factors for glaucoma development and an update on follow-up data**

G. De Moraes (US)

8.12 - 8.24

**EMGT: Risk factors for glaucoma worsening**

E. Higginbotham (US)

8.24 - 8.36

**Chennai: Risk factors for incident glaucoma**

R. George (India)

8.36 - 8.48

**Angle closure: What is known about risk factors for developing PACG or acute attacks**

M. He (China)

8.48 - 9.00

**Disc hemorrhage and progression; what does the literature tell us**

M. Araie (Japan)

9.00 - 9.12

**Is IOP fluctuation an important concern in glaucoma progression?**

M. Nicoleta (Canada)

9.12 - 9.24

**Other considerations about progression: What do you tell your patients?**

H. Quigley (US)

9.24 - 9.30

**Q&A**

WED

THU

FRI

SAT

**8.00 - 9.30 am**

**Room 220-222**

**S21 Considerations for initial treatment of glaucoma**

*Chairs:*

A. Sit (US), R. Susanna (Brazil)

8.00 - 8.05

**Introduction**

A. Sit (US)

8.05 - 8.17

**When should we treat ocular hypertension?**

J. Piltz-Seymour (US)

8.17 - 8.29

**Open-angle glaucoma: Medications first**

F. Mikelberg (Canada)

8.29 - 8.41

**Open-angle glaucoma: Laser first**

J. Katz (US)

8.41 - 8.53

**Open-angle glaucoma: Surgery first**

T. Shaarawy (Switzerland)

8.53 - 9.05

**What is the preferred initial treatment for angle-closure glaucoma?**

C. Tham (Hong Kong)

9.05 - 9.25 **Panel-discussion**

9.25 - 9.30 **Wrap up**

R. Susanna (Brazil)

WED

**8.00 am - 3.30 pm Room 210**

**WGC Film Festival**

*Please see page 94 for the list of videos to be shown.*

THU

**9.30 - 10.00 am BREAK - Exhibition Hall**

FRI

**10.00 - 11.30 am Room Ballroom AB**

**S22 Glaucoma surgery:**

**Complications & rescue operations**

*Chairs:*

T. Dada (India), S. Mosaed (US)



SAT

10.00 - 10.12

**Management of intraoperative and early postoperative complications of trabeculectomy**

V.P. Costa (Brazil)

10.12 - 10.24

**Surgical treatment of late complications of trabeculectomy**

T. Dada (India)

10.24 - 10.36

**How to manage a failing / failed filter in penetrating / non penetrating glaucoma surgery**

P. Palmberg (US)

10.36 - 10.48

**Post-operative care of aqueous shunts**

K. Barton (UK)

10.48 - 11.00

**Complications requiring posterior segment interventions: malignant glaucoma, hemorrhagic choroidal detachment and bleb related endophthalmitis**

L. Vijaya (India)

11.00 - 11.12

**Prevention and management of problems with new microsurgical devices**

T. Samuelson (US)

11.12 - 11.30

**Panel Discussion**

**10.00 - 11.30 am Room 109-110****S23 Challenges of medical therapy***Chairs:*

R. Ritch (US), C.E. Traverso (Italy)



10.00 - 10.15

**New approaches to trabecular outflow**

P. Kaufman (US)

10.15 - 10.30

**Compliance and adherence to medications: Has anything changed?**

D. Broadway (UK)

10.30 - 10.45

**Drug delivery for glaucoma with LipoLat: a liposome technology**

T. Wong (Singapore)

10.45 - 11.00

**Anti-glaucoma medication beyond lowering IOP**

J. Goldberg (US)

11.00 - 11.15

**Ocular surface disease and glaucoma**

C. Baudouin (France)

11.15 - 11.30

**Ginkgo Biloba and glaucoma management**

K.H. Park (Korea)

**WED****THU****FRI****SAT****10.00 - 11.30 am Room 118-120****S24 Clinician Scientist Symposium: Challenges for researchers in glaucoma***Chairs:*

G. Spaeth (US), R.N. Weinreb (US)

10.00 - 10.18

**How to get started in research**

J. Crowston (Australia)

10.18 - 10.36

**Setting priorities and time management**

J. Schuman (US)

10.36 - 10.54

**Current challenges in glaucoma laboratory research**

K. Martin (UK)

10.54 - 11.12

**Current challenges in glaucoma clinical research**

F. Medeiros (US)

11.12- 11.30

**From the laboratory to the clinic**

J. Wiggs (US)

**10.00 - 11.30 am Room 211-214**



**S25 Impact of functional impairment from glaucoma, enhancing visual performance in patients with glaucoma**

*Chairs:* I. Goldberg (Australia), J. Myers (US)

**WED**

10.00 - 10.18 **Do glaucoma patients have greater fear of falling? What can be done?**

P. Ramulu (US)

10.18 - 10.36 **Do patients with glaucoma have less physical activity?**

E.A. Maul (Chile)

**THU**

10.36 - 10.54 **Recognizing faces, reading, and driving: how difficult this is for glaucoma patients?**

D. Garway-Heath (UK)

10.54 - 11.12 **The patient's perspective**

J. Lovett (US)

**FRI**

11.12 - 11.30 **Rehabilitation in patients with glaucoma-related low-vision**

S. Warner (Canada)

**SAT**

**10.00 - 11.30 am Room 220-222**

**S26 Glaucoma care in the developing world**

*Chairs:* R. Pérez Grossman (Peru), G.C. Sekhar (India)

10.00 - 10.15 **Global burden of glaucoma**

D. Friedman (US)

10.15 - 10.30 **PACG East-Asian Experience**

T. Aung (Singapore)

10.30 - 10.45 **PACG South-Asian Experience**

R. Sihota (India)

10.45 - 11.00 **Clinical skill vs. technology for glaucoma diagnosis in the developing world**

G.C. Sekhar (India)

11.00 - 11.15 **Challenges of medical therapy in the developing world**

P.A. de Arruda Mello (Brazil)

11.15 - 11.30 **Appropriate surgical treatment for glaucoma in the developing world**

R. Pérez Grossman (Peru)


**11.30 - 12.00 am BREAK - Foyer Ballroom AB**

## LUNCH SYMPOSIUM


<b>12.00 - 1.00 pm</b>	<b>Room Ballroom AB</b> <b>Patient Centered Glaucoma Therapy - What really matters</b> <i>Chair:</i> T. Shaarawy (Switzerland)	
12.05 - 12.10	<b>Opening</b> T. Shaarawy (Switzerland)	WED
12.10 - 12.20	<b>Mechanisms of BAK Toxicity in a Human Trabecular Meshwork Cell Line and the protective role of Preservative-Free Tafluprost</b> C. Hutnik (Canada)	THU
12.20 - 12.30	<b>Challenges related to Glaucoma Therapy</b> G. Hollo (Hungary)	
12.30 - 12.40	<b>New Perspectives in 24 Hour IOP Management</b> T. Konstas (Greece)	FRI
12.40 - 12.50	<b>Prostaglandin Usage in a Clinical setting: What We've Learned</b> N. Pfeiffer (Germany)	
12.50 - 12.55	<b>Q&amp;A and Closing</b> T. Shaarawy (Switzerland)	SAT

**This symposium is sponsored by MSD (Merck & Co) & Santen**

**1.00 - 2.00 pm**      **LUNCH and VISIT the Poster Area and Exhibition**  
*Please collect your lunchbox voucher at 1 pm at the entrance of Ballroom AB.*

<b>2.00 - 3.30 pm</b>	<b>Room Ballroom AB</b> <b>S27 Glaucoma grand rounds</b> <i>Chairs:</i> J. Piltz-Seymour (US), J. Schuman (US) <i>Panel:</i> E. Blumenthal (Israel), G.C. Sekhar (India), F. Gomez Goyeneche (Colombia), F. Goñi (Spain), A. Robin (US), T. Yamamoto (Japan)	
2.00 - 2.05	<b>GR01 Unilateral recalcitrant glaucoma in an immunocompromised child:</b> A. Agarwal (India)	
2.05 - 2.18	<b>Panel Discussion</b>	
2.18 - 2.23	<b>GR02 A case of multiple anterior segment anomalies in a newborn</b> B. Edmunds (US), M. Raecker (US)	

	2.23 - 2.36	<b>Panel Discussion</b>
	2.36 - 2.41	<b>GR03 Malignant Glaucoma</b> J. Kattige (India)
	2.41 - 2.54	<b>Panel Discussion</b>
WED	2.54 - 2.59	<b>GR04 Choroidals one year after Glaucoma Surgery</b> P. Allarey (Singapore)
	2.59 - 3.12	<b>Panel Discussion</b>
	3.12 - 3.17	<b>GR05 Topiramate Hypopyon with Hypotony</b> S. Dikshit (India)
THU	3.17 - 3.30	<b>Panel Discussion</b>

	<b>2.00 - 3.30 pm</b>	<b>Room 109-110</b>	
FRI		<b>S28 Epidemiology and screening for glaucoma</b>	
	<i>Chairs:</i>	P. Healey (Australia), L. Sakata (Brazil)	
	2.00 - 2.05	<b>Opening remarks</b> P. Healey (Australia)	
SAT	2.05 - 2.15	<b>What have we learnt that can help us in clinical practice?</b> P. Healey (Australia)	
	2.15 - 2.18	<b>Q&amp;A</b>	
	2.18 - 2.28	<b>Normal tension Glaucoma: Who is at risk for visual impairment?</b> A. Iwase (Japan)	
	2.28 - 2.31	<b>Q&amp;A</b>	
	2.31 - 2.41	<b>Diabetes, systemic arterial hypertension, and ocular perfusion pressure - How to incorporate this information into clinical practice?</b> H. Quigley (US)	
	2.41 - 2.44	<b>Q&amp;A</b>	
	2.44 - 2.54	<b>Primary glaucoma heritability: should we bother with family history?</b> J. Wiggs (US)	
	2.54 - 2.57	<b>Q&amp;A</b>	
	2.57 - 3.07	<b>Glaucoma blindness: POAG vs. PACG. Who goes blind?</b> R. George (India)	
	3.07 - 3.10	<b>Q&amp;A</b>	
	3.10 - 3.20	<b>How to minimize angle closure glaucoma blindness in our daily clinical practice?</b> L. Sakata (Brazil)	
	3.20 - 3.23	<b>Q&amp;A</b>	
	3.23 - 3.30	<b>Discussion with all speakers</b>	

<b>2.00 - 3.30 pm</b>	<b>Room 118-120</b>	
	<b>S29 IOP Around the clock (measurement and significance)</b>	
<i>Chairs:</i>	M. Kook (Korea), R.N. Weinreb (US)	
2.00 - 2.15	<b>Lessons from IOP-monitoring of the non-human primate</b>	
	C. Downs (US)	
2.15 - 2.30	<b>Are office diurnal tests of IOP useful?</b>	
	T. Realini (US)	
2.30 - 2.45	<b>What have we learned about IOP during 20 years from the sleep laboratory</b>	
	J. Liu (US)	
2.45 - 3.00	<b>24-hour IOP for various open-angle glaucoma: Implications for glaucoma treatment</b>	
	M. Kook (Korea)	
3.00 - 3.15	<b>24-hour IOP studies with a contact lens sensor</b>	
	K. Mansouri (Switzerland)	
3.15 - 3.30	<b>What we will learn from continuous IOP monitoring</b>	
	R.N. Weinreb (US)	

WED

THU

FRI

SAT

<b>2.00 - 3.30 pm</b>	<b>Room 211-214</b>	
	<b>S30 Aqueous drainage devices</b>	
<i>Chairs:</i>	K. Barton (UK), M. Sherwood (US)	
2.00 - 2.20	<b>Capsule development over the episcleral plate</b>	
	J. Freedman (US)	
2.20 - 2.40	<b>The Grand tube Studies</b>	
	V.P. Costa (Brazil)	
2.40 - 3.00	<b>Late Complications of Drainage implants</b>	
	S. Bhartiya (India)	
3.00 - 3.20	<b>Economic of Drainage implant use in Developed and Developing Countries</b>	
	R. Sihota (India)	
3.20 - 3.30	<b>Q&amp;A</b>	

<b>2.00 - 3.30 pm</b>	<b>Room 220-222</b>	
	<b>S31 Glaucoma and African ancestry</b>	
<i>Chairs:</i>	S. Melamed (Israel), M.R. Wilson (US)	
2.00 - 2.15	<b>Glaucoma and African ancestry: Scope of the problem</b>	
	tbd	
2.15 - 2.30	<b>Surgical experience form African-Carribeans in the UK</b>	
	P. Shah (UK)	

2.30 - 2.45	<b>Secondary Glaucomas and African ancestry</b> L. Jones (US)
2.45 - 3.00	<b>Glaucoma in Africa: View from the trenches,</b> S. Olawoye (Nigeria)
3.00 - 3.15	<b>Key points from the World Glaucoma Association African Glaucoma summit 2010</b> S. Melamed (Israel)
3.15 - 3.30	<b>Glaucoma and African Ancestry: Unresolved Questions</b> M.R. Wilson (US)

WED

THU

**3.30 - 4.00 pm BREAK and VISIT the Poster Area and Exhibition**

FRI

**4.00 - 5.00 pm Room Ballroom AB**  
**C26 Emerging glaucoma surgery –**  
**1 (ab interno) theory and techniques**  
*Chairs:* S. Gandolfi (India), T. Samuelson (US)



SAT

4.00 - 4.12 **The Rationale for Angle Surgery**  
T. Grippo (US)

4.12 - 4.24 **Ab-interno stenting procedures: Pearls and Pitfalls**  
I. Ahmed (Canada)

4.24 - 4.36 **Ab-Interno Trabeculectomy/trabeculotomy: Pearls and Pitfalls**  
R. Fellman (US)

4.36 - 4.48 **Ab-interno Suprachroidal devices: Pearls and Pitfalls**  
S. Vold (US)

4.48 - 5.00 **The MIGS Revolution: Unmet needs**  
Discussion with all speakers

**4.00 - 5.40 pm Room 109-110**  
**C27 Advances in understanding and management of angle closure (in cooperation with APGS)**  
*Chairs:* T. Aung (Singapore), I. Goldberg (Australia), S. Sawaguchi (Japan)

4.00 - 4.10 **Long-term prognosis and complications of laser iridotomy**  
T. Yamamoto (Japan)

4.10 - 4.20 **Mechanisms behind angle closure: a critical assessment**  
N.M. Aquino (Philippines)





4.20 - 4.30	<b>Relation between Van Herick Grading and UBM findings found in a population-based setting</b> M. Araie (Japan)
4.30 - 4.40	<b>New findings in angle closure genetics</b> T. Aung (Singapore)
4.40 - 4.50	<b>Diurnal IOP in PACG</b> P. Rojanapongpun (Thailand)
4.50 - 5.00	<b>What is new in anterior segment imaging</b> K.H. Park (Korea)
5.00 - 5.10	<b>Angle-closure glaucoma: An evolving surgical approach</b> C. Tham (Hong Kong)
5.10 - 5.20	<b>Management of acute angle-closure</b> C.L. Ho (Singapore)
5.20 - 5.30	<b>Clinical outcomes of angle closure and angle closure glaucoma</b> P. Chew (Singapore)
5.30 - 5.40	<b>Discussion</b>

WED

THU

FRI

<b>4.00 - 5.00 pm</b>	<b>Room 118-120</b> <b>S32 Slit lamp surgical techniques in glaucoma care</b> <i>Chairs:</i> S. Melamed (Israel), A. Mermoud (Switzerland)
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SAT

4.00 - 4.12	<b>Releasing suture pulling and all superficial flap manipulation</b> K. Barton (UK)
4.12 - 4.24	<b>Removal of conjunctiva suture in glaucoma surgery</b> J. Taylor (Canada)
4.24 - 4.36	<b>Adding or removing viscoelastic after glaucoma surgery</b> J. Acosta (Argentina)
4.36 - 4.48	<b>Needling with or without MMC</b> E.M. Ghoneim (Egypt)
4.48 - 5.00	<b>Goniopuncture after NPGS</b> P.E. Libre (US)

<b>4.00 - 5.00 pm</b>	<b>Room 211-214</b> <b>C28 Imaging 1: Basic technology and diagnosis</b> <i>Chairs:</i> D. Garway-Heath (US), M. Fingeret (US)
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4.00 - 4.12	<b>Introduction to imaging</b> C. Bowd (US)
4.12 - 4.24	<b>Systematic approach to analyzing printout</b> M. Kook (Korea)

4.24 - 4.36	<b>Common artifacts</b> M. Fingeret (US)
4.36 - 4.48	<b>OCT Glaucoma Examples</b> F. Aptel (France)
4.48 - 5.00	<b>Progression Analysis</b> D. Garway-Heath (UK)

WED

<b>4.00 - 5.00 pm</b>	<b>Room 220-222</b> <b>C29 Glaucoma epidemiology: Prevalence and diagnosis</b> <i>Chairs:</i> R. Neshet (Israel), J. Thygesen (Denmark), R. Varma (US)
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THU

4.00 - 4.08	<b>The current and projected prevalence of glaucoma worldwide</b> S. Mansberger (US)
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FRI

4.08 - 4.10	<b>Q&amp;A</b>
4.10 - 4.18	<b>Angle closure glaucoma epidemiology: important aspects for daily clinical practice</b> L. Sakata (Brazil)

SAT

4.18 - 4.20	<b>Q&amp;A</b>
4.20 - 4.28	<b>Epidemiology in angle closure and angle closure glaucoma: Risk Factors</b> D. Friedman (US)
4.28 - 4.30	<b>Q&amp;A</b>
4.30 - 4.38	<b>Distribution of glaucoma-related quantitative traits in population studies</b> M. He (China)
4.38 - 4.40	<b>Q&amp;A</b>
4.40 - 4.48	<b>Two glaucoma prevalence studies in Japan, Tajimi Study and Kumejima Study</b> Y. Suzuki (Japan)
4.48 - 4.50	<b>Q&amp;A</b>
4.50 - 4.58	<b>The Prevalence of primary open angle glaucoma in different method of estimation</b> G. Li (Canada)
4.58 - 5.00	<b>Q&amp;A</b>

<b>4.00 - 5.00 pm</b>	<b>Room 121-122</b> <b>C30 Understanding exfoliation syndrome and ex-foliation glaucoma</b> <i>Chairs:</i> G. Hollo (Hungary), R. Ritch (US)
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4.00 - 4.12	<b>Ocular characteristics of XFG</b> F. Topouzis (Greece)
4.12 - 4.24	<b>Systematic associations XSF/XFG</b> G. Hollo (Hungary)
4.24 - 4.36	<b>Pathophysiology and molecular biology in XFG</b> U. Schlötzer-Schrehardt (Germany)
4.36 - 4.48	<b>Genetics and gene-environment interactions</b> L. Pasquale (US)
4.48 - 5.00	<b>Treatments options</b> A. Konstas (Greece)

WED

THU

<b>4.00 - 5.00 pm</b>	<b>Room 202-203</b> <b>C31 Cyclophotocoagulation: Why, when and how?</b> <i>Chairs:</i> P. Chew (Singapore), S. Lin (US)
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FRI

4.00 - 4.10	<b>Cyclophotocoagulation overview</b> S. Lin (US)
4.10 - 4.25	<b>Prevailing techniques</b> P. Chew (Singapore)
4.25 - 4.35	<b>Problems &amp; Complications</b> M. Walland (Australia)
4.35 - 4.50	<b>New CPC Perspective / Emerging developments</b> M.C. Aquino (Singapore)
4.50 - 5.00	<b>Indications and Case Studies</b> D. Broadway (UK)

SAT

<b>4.00 - 5.00 pm</b>	<b>Room 208-209</b> <b>C32 Blood flow in glaucoma</b> <i>Chairs:</i> A. Hafez (Canada), S. Orgul (Switzerland)
4.00 - 4.15	<b>Clinical evaluation of ocular hemodynamic parameters in Glaucoma</b> I. Januleviciene (Lithuania)
4.15 - 4.30	<b>Association between optic nerve microcirculation and glaucomatous damage</b> N. Fuse (Japan)
4.30 - 4.45	<b>Autoregulation and effect IOP reduction and ocular blood flow</b> A. Hafez (Canada)
4.45 - 5.00	<b>Microcirculatory risk factors in Glaucoma</b> S. Orgul (Switzerland)

**4.00 - 5.00 pm**

**Room 217-219**

**C33 Glaucoma management and education in the developing world**

*Chairs:*

M. Babic (Brazil), C. Hartleben (Mexico)

**WED**

4.00 - 4.12

**Glaucoma in the developing world - a global scope**

A. Robin (US)

4.12 - 4.24

**Strategies to improve Glaucoma awareness**

J. Ge (China)

4.24 - 4.36

**Train the trainers - achieving the real need in Glaucoma education**

P.A. de Arruda Mello (Brazil)

4.36 - 4.48

**Challenges of the Glaucoma treatment in the developing world**

F. Gomez Goyeneche (Colombia)

4.48 - 5.00

**Glaucoma surgery as first choice - benefits or harms?**

T. Realini (US)

**THU**

**FRI**

**SAT**

**4.00 - 5.00 pm**

**Room 114-115**

**C34 Generic drugs in glaucoma**

*Chairs:*

M. Kahook (US), G. Trope (Canada)

4.00 - 4.15

**Economic implications of Generic medications**

E.F. Meier-Gibbons (Switzerland)

4.15 - 4.30

**Active ingredient: Brand vs. Generic**

M. Kahook (US)

4.30 - 4.45

**Excipients: Brand vs. Generic**

Z. Mammo (Canada)

4.45 - 5.00

**IOP Lowering efficacy: Brand vs. Generic**

C. Hutnik (Canada)

**5.00 - 6.00 pm**

**Room Ballroom AB**

**S33 What is new in glaucoma surgery?**

*Chairs:*

R.D. Fechtner (US), F. Lerner (Argentina)

5.00 - 5.09

**Ab interno devices**

T. Shaarawy (Switzerland)

5.09 - 5.18

**Suprachoroidal devices**

J. Garcia Feijoo (Spain)

5.18 - 5.27

**Ab interno trabeculotomy**

N. Loewen (US)



5.27 - 5.36	<b>ExPress glaucoma filtration device</b> R.D. Fechtner (US)
5.36 - 5.45	<b>Trabeculectomy with suprachoroidal diversion</b> R. Pérez Grossman (Peru)
5.45 - 6.00	<b>Discussion</b>

WED

<b>5.00 - 6.00 pm</b>	<b>Room 118-120</b>
	<b>C35 Non penetrating glaucoma surgery</b>
<i>Chairs:</i>	J. Acosta (Argentina), A. Mermoud (Switzerland)

THU

5.00 - 5.10	<b>NPGS Classic and Evolution</b> A. Mermoud (Switzerland)
5.10 - 5.20	<b>NPGS improving results</b> J. Acosta (Argentina)
5.20 - 5.35	<b>Canaloplastie</b> R. Carassa (Italy)
5.35 - 5.45	<b>NPGS combine procedures in special cases</b> I. Negri Aranguren (Argentina)
5.45 - 6.00	<b>Mechanism and results</b> D. Rhee (US)

FRI

SAT

<b>5.00 - 6.00 pm</b>	<b>Room 211-214</b>
	<b>C36 Imaging 2: Progression and management</b>
<i>Chairs:</i>	M. Fingeret (US), G. Wollstein (US)



5.00 - 5.12	<b>Longitudinal Changes in the Optic Nerve in Glaucoma - From Animal Studies to Clinical Imaging Implication</b> N. Strouthidis (UK)
5.12 - 5.24	<b>Detection of Glaucoma Progression in the Peripapillary Region</b> G. Wollstein (US)
5.24 - 5.36	<b>Macula Imaging for Detection of Glaucoma Progression</b> S. Ohkubo (Japan)
5.36 - 5.48	<b>Glaucoma and Myopia: Challenges and Pearls for Progression Detection</b> R. Chang (US)
5.48 - 6.00	<b>Neurological Diseases Imitating Glaucoma Progression</b> P. Schlottmann (UK)

**5.00 - 6.00 pm**

**Room 220-222**

**C37 Tips from experts:**

**How to make your trabeculectomy work**

*Chair:*

P. Palmberg (US)



**WED**

5.00 - 5.15

**Introduction**

P. Palmberg (US)

5.15 - 5.30

**Improving the experience from the patient's perspective**

S. Asawaphureekorn (Thailand)

**THU**

5.30 - 5.45

**What to do to modulate wound healing and surgical pearls**

D. Broadway (UK)

5.45 - 6.00

**Post-operative management, suture lysis, adjunctive therapy and surgical pearls**

T. Fukuchi (Japan)

**FRI**

**5.00 - 6.00 pm**

**Room 121-122**

**C38 Wound healing and postoperative bleb management**

*Chairs:*

G. Skuta (US), T. Wong (Singapore)

**SAT**

5.00 - 5.05

**Course introduction**

G. Skuta (US)

5.05 - 5.20

**Role of chronic topical medications on trabeculectomy outcome**

C. Baudouin (France)

5.20 - 5.35

**How to identify the failing bleb and bleb needling techniques**

T. Wong (Singapore)

5.35 - 5.50

**Management of early and late bleb leaks**

J. Schultz (US)

5.50 - 6.00

**Discussion**

**5.00 - 6.00 pm**

**Room 202-203**

**C39 Glaucoma Health Economics**

*Chairs:*

A. Azuara Blanco (UK), S. Kymes (US)

5.00 - 5.12

**The economics of management of ocular hypertension**

A. Azuara Blanco (UK)

5.12 - 5.24

**Economic perspectives on the Role of Target IOP in Management of Glaucoma**

E.F. Meier-Gibbons (Switzerland)

5.24 - 5.36	<b>Economic evaluation and the future of IOP lowering treatments for Glaucoma</b> S. Kymes (Switzerland)
5.36 - 5.48	<b>Cost analysis of Generic Ophthalmic Medications: Implications for the future</b> C. Hutnik (Canada)
5.48 - 6.00	<b>Health policy and Glaucoma screening</b> M. Boland (US)

WED

<b>5.00 - 6.00 pm</b>	<b>Room 205-206</b> <b>C40 Secondary angle closure: Diagnosis &amp; management</b> <i>Chairs:</i> V. Tantisevi (Thailand), P. Rojanapongpung (Thailand)
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THU

5.00 - 5.05	<b>Introduction</b> V. Tantisevi (Thailand)
5.05 - 5.15	<b>Common pitfalls in secondary ACG diagnosis</b> V. Tantisevi (Thailand)
5.15 - 5.25	<b>Is imaging helpful in diagnosis of secondary ACG?</b> N. Wang (China)
5.25 - 5.35	<b>Are iridoplasty/iridotomy necessary for secondary ACG management?</b> D. Leung (Hong Kong)
5.35 - 5.45	<b>Filtering or GDD for primary surgery in secondary ACG?</b> A. White (Australia)
5.45 - 5.55	<b>Q&amp;A</b>
5.55 - 6.00	<b>Closing</b> V. Tantisevi (Thailand), P. Rojanapongpung (Thailand)

FRI

SAT

<b>5.00 - 6.00 pm</b>	<b>Room 208-209</b> <b>C41 World Glaucoma Week: Birth and Growth of a Glaucoma Awareness Movement</b> <i>Chairs:</i> I. Goldberg (Australia), G.N. Lambrou (Greece)
5.00 - 5.15	<b>Reviewing our Vision and our Goals after 5 Years</b> G.N. Lambrou (Greece)
5.15 - 5.30	<b>There's Glee in Glaucoma Awareness - the Caribbean Experience</b> J. Bird (Antigua)
5.30 - 5.45	<b>World Glaucoma Week - Canadian Perspectives and Activities</b> N. Gupta (Canada)

5.45 - 6.00

**World Glaucoma Week in Australia: Glaucoma Australia's role**

I. Goldberg (Australia)

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**WED**

**5.00 - 6.00 pm**

**Room 217-219**

**C42 Neuroprotection & apoptosis of retinal ganglion cells related to glaucoma**

*Chairs:*

M. Schwartz (Israel), J. Lindsey (US)

**THU**

5.00 - 5.12

**RGC apoptotic pathways in glaucoma**

H. Levkovitch-Verbin (Israel)

5.12 - 5.15

**Q&A**

5.15 - 5.27

**Role of RGC mitochondria in glaucomatous optic neuropathy**

J. Lindsey (US)

5.27 - 5.30

**Q&A**

5.30 - 5.42

**RGC autophagy in glaucoma**

C. Nucci (Italy)

5.42 - 5.45

**Q&A**

5.45 - 5.57

**Neuroprotective pathways in glaucoma**

tbd

5.57 - 6.00

**Q&A**

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**5.00 - 6.00 pm**

**Room 114-115**

**C43 Management of complex glaucomas**

*Chairs:*

C.E. Traverso (Italy), T. Yamamoto (Japan)

5.00 - 5.15

**Management of neovascular glaucoma induced by ischemic retinal diseases**

T. Higashide (Japan)

5.15 - 5.30

**Contemporary management of uveitis in the glaucomatous eye**

D. Chu (US)

5.30 - 5.45

**Management of glaucoma following corneal surgery**

K. Mori (Japan)

5.45 - 6.00

**Difficult surgical cases**

E. Blumenthal (Israel)

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**5.00 - 6.00 pm**

**Room 116-117**

**C44 First steps of becoming an effective mentor**

P. Shah (UK)

*Chair:*



5.00 - 5.15

**Foundations of mentoring**

P. Shah (UK)

5.15 - 5.30

**Mentoring vignettes: Early recognition of problems**

F. Sii (UK)

5.30 - 5.45

**Stages of mentoring and specific mentoring skills**

R.N. Weinreb (US)

5.45 - 6.00

**Obstacles and ethics in mentoring**

P. Shah (UK)

WED

THU

**7.30 - 11.00 pm**

**WGC Congress dinner at the Vancouver Aquarium**

*Tickets available at registration desk at CAD\$ 65.*

FRI

SAT

**SATURDAY JULY 20, 2013**

Scan for Faculty Bio's:



7.00 - 8.00 am

**Room 205-206**

**The Corvis ST: A new tool for the assesment of IOP and biomechanical properties**

7.00 - 7.30

**Impact of corneal deformation response on intraocular pressure measurement**

C. Leung (Hong Kong)

7.30 - 7.45

**Comparing IOP measurements between Corvis ST, Goldmann Applanation Tonometry and Non-Contact Tonometry**

Neuburger, University Freiburg (Germany)

7.45 - 7.55

**New approaches for Glaucoma-Screening with the OCULUS Pentacam**

Neuburger, University Freiburg (Germany)

**This symposium is sponsored by Oculus Optikgeräte GmbH**

**8.00 - 11.30 am      Room 210**  
**WGC Film Festival**

*Please see page 96 for the list of videos to be shown.*

**WED**

**8.00 - 9.30 am      Room Ballroom AB**  
**S34 What's hot in glaucoma -**  
**Important contributions in the past year**



*Chairs:* J. Brandt (US), G. Skuta (US), N. Wang (China)

**THU**

**8.00 - 8.15      The Hunt for Glaucoma Genes - A Status Report**  
J. Craig (Australia)

**8.15 - 8.30      Angle Closure in the Developing World: What does the**  
**Future Hold**  
R. George (India)

**FRI**

**8.30 - 8.45      Is neuroprotection feasible?**  
F. Cordeiro (UK)

**SAT**

**8.45 - 9.00      Minimally-invasive Glaucoma Surgery - Where we are,**  
**where we're going to**  
I. Ahmed (Canada)

**9.00 - 9.15      Glaucoma as a disease of the Central nervous system**  
N. Gupta (Canada)

**9.15 - 9.30      Glaucoma meets Clinical Informatics - What the future**  
**holds**  
M. Boland (US)

**8.00 - 9.30 am**

**Room 109-110**

**S35 Stem cells and regenerative medicine**



*Chairs:*

K. Martin (UK), A. Pebay (Australia)

8.00 - 8.15

**Stem cell approaches to glaucoma**

K. Martin (UK)

8.15 - 8.30

**Can inflammation impair neuronal differentiation of stem cells?**

A. Pebay (Australia)

8.30 - 8.45

**Harnessing induced pluripotent cells**

A. Hewitt (Australia)

8.45 - 9.00

**Stem Cell differentiation into retinal ganglion cells**

S. Singhal (Singapore)

9.00 - 9.15

**Protecting and regeneration of ganglion cell dendrites after axonal injury**

A. Di Polo (Canada)

9.15 - 9.30

**Trabecular meshwork stem cells**

Y. Du (US)

WED

THU

FRI

SAT

**8.00 - 9.30 am**

**Room 118-120**

**S36 Neuroimaging of glaucoma**



*Chairs:*

M. Araie (Japan), Y. Yucel (Canada)

8.00 - 8.15

**Mapping central visual pathway degeneration in glaucoma**

Y. Yucel (Canada)

8.15 - 8.30

**Detecting brain changes in glaucoma by diffusion tensor imaging**

G. Michelson (Germany)

8.30 - 8.45

**Brain changes in normal tension glaucoma**

J. Jonas (Germany)

8.45 - 9.00

**White matter lesions and glaucoma progression**

D. Leung (Hong Kong)

9.00 - 9.15

**Brain changes in monkey experimental glaucoma**

H. Hara (Japan)

9.15 - 9.30


**Cerebrovascular reactivity in open angle glaucoma, MRI study**

C. Zhang (China)

**9.30 - 10.00 am      BREAK - Exhibition Hall**

WED	10.00 - 11.30 am	<b>Room Ballroom AB</b> <b>S37 Surgical grand rounds:</b> <b>Challenging Glaucoma Cases</b>	
	<i>Chairs:</i>	F. Grehn (Germany), N. Pfeiffer (Germany)	
THU	10.00 - 10.10	<b>Management of glaucoma and cataract in outreach programs</b>	
		S.C. Loon (Singapore)	
	10.10 - 10.20	<b>General Health Issues that make Glaucoma Worse</b>	
		M. Coote (Australia)	
FRI	10.20 - 10.30	<b>Successful Trabeculectomy but unsatisfied patient</b>	
		N. Pfeiffer (Germany)	
	10.30 - 10.40	<b>Rescue of a scarring filtering bleb</b>	
		F. Grehn (Germany)	
SAT	10.40 - 10.50	<b>What to do in case of over filtration?</b>	
		N. Pfeiffer (Germany)	
	10.50 - 11.00	<b>And what if the way forward is blocked?</b>	
		T. Shaarawy (Switzerland)	
	11.00 - 11.10	<b>Surgical decision in a secondary childhood Glaucoma</b>	
		F. Grehn (Germany)	
	11.10 - 11.20	<b>Drainage Glaucoma devices. Challenges and tricks</b>	
		J. Garcia Feijoo (Spain)	
	11.20 - 11.30	<b>Q&amp;A</b>	
<hr/>			
	10.00 - 11.30 am	<b>Room 109-110</b> <b>S38 Targeting aqueous outflow</b>	
	<i>Chairs:</i>	N. Gupta (Canada), P. Kaufman (US)	
	10.00 - 10.15	<b>Conventional outflow pathway and new molecular targets</b>	
		T. Borrás (US)	
	10.15 - 10.18	<b>Discussion</b>	
	10.18 - 10.33	<b>The lymphatic outflow pathway and new insights</b>	
		N. Gupta (Canada)	
	10.33 - 10.36	<b>Discussion</b>	
	10.36 - 10.51	<b>Molecular signaling in the outflow pathways</b>	
		P. Kaufman (US)	
	10.51 - 10.54	<b>Discussion</b>	
	10.54 - 11.09	<b>Stem cells for aqueous outflow</b>	
		K. Martin (UK)	
	11.09 - 11.12	<b>Discussion</b>	

11.12 - 11.27	<b>Aqueous Dynamics in open angle Glaucoma - new insights</b> C. Toris (US)
11.27 - 11.30	<b>Discussion</b>

<b>10.00 - 11.30 am</b>	<b>Room 118-120</b>		<b>WED</b>
	<b>S39 Biomarkers in glaucoma</b>		
<i>Chairs:</i>	F. Grus (Germany), D. Leung (Hong Kong), C. Pang (Hong Kong)		

10.00 - 10.15	<b>Genetic Biomarkers</b> A. Hewitt (Australia)	<b>THU</b>
10.15 - 10.30	<b>Autoimmune Biomarkers</b> F. Grus (Germany)	
10.30 - 10.45	<b>Metabolomics Biomarker</b> L. Levin (US)	<b>FRI</b>
10.45 - 11.00	<b>Cellular Biomarker</b> K. Bell (Germany)	
11.00 - 11.15	<b>Oxidative Stress and Glaucoma</b> F. Lerner (Argentina)	
11.15 - 11.30	<b>Proteomics Biomarkers</b> T. Borrás (US)	<b>SAT</b>

# GLOBAL ASSEMBLY OF GLAUCOMA SOCIETIES

The WGA unites 80 Glaucoma Societies. The larger regions are represented by the regional Glaucoma Societies in the General Assembly (e.g., the European Glaucoma Society represents the national Glaucoma Societies in Europe). The Global Assembly of Glaucoma Societies is organized every two years at the occasion of the World Glaucoma Congress. Representatives of all national and regional Glaucoma Societies (see page 104) get together during this major event to discuss topics of interest at a global glaucoma level. The Global Assembly is a unique occasion for representative of the worlds Glaucoma Societies to meet each other. Since 2011, 4 Glaucoma Societies/Groups/Sections have joined the WGA.

## **Highlights from the Global Assembly agenda:**

- Introduction of new Glaucoma Societies & mergers since WGC-2011
- The World Glaucoma Association in 2013
- International Glaucoma Research
- World Glaucoma Week
- Consensus & Promulgation

# SCIENTIFIC PROGRAM - HIGHLIGHTS

## **This meeting**

After the highly successful World Glaucoma Congress in Vienna (2005), Singapore (2007), Boston (2009) and Paris (2011) some adaptations were made to the program, largely based on the request from the faculty and participants.

The Scientific Program is based upon the following principles:

- o Opening with excellent keynote speakers
- o Didactic sessions by invited top speakers
- o Consensus outcome updates
- o New consensus outcomes on childhood glaucoma
- o Parallel basic clinical science sessions (new developments with discussion)
- o Topics from didactic sessions to come back in courses where extensive discussion is possible (more courses, more basic examination and treatment courses)
- o Special and extensive attention to posters of original research (recognitions, organized discussion at the posters)
- o Glaucoma Society posters: developments in each country that is of interest to others
- o Special attention to physicians in training
- o Special attention to upcoming clinician scientists
- o Excellent surgical sessions
- o More video surgical activity
- o Grand Rounds
- o Childhood Glaucoma Track on Thursday
- o Surgery Day on Friday

## **Guidance through the program**

The WGC participants will find a majority of parallel sessions and a few solo sessions. The solo sessions are:

- o Canadian Glaucoma Society Symposium
- o Opening Session
- o Plenary Lunch Symposiums

## **Opening Session and Keynote Lecture**

The Opening Session will present an overview on the WGA activities and initiatives: Consensus, IGR, World Glaucoma Week and the Global WGA Research Awards. Keynote lecture will review the state of glaucoma diagnosis and therapy when Dr Steven Drance started training in 1953 and the changes in which he was involved.

## Consensus updates

The WGA proudly presents the result of its Consensus Meetings. Eight topics have been published in books (by Kugler Publications, Amsterdam):

- o 2003: Structure and Function
- o 2005: Surgery Open-Angle Glaucoma
- o 2006: Angle-Closure Glaucoma
- o 2007: IOP
- o 2008: Screening
- o 2009: Blood Flow
- o 2010: Medical Therapy
- o 2011: Progression of Glaucoma

On Tuesday, July 16, the 9th Consensus Meeting on Childhood Glaucoma was held. Updates of this Consensus meeting will be given during the Opening Session and the Highlights Symposium, planned on Thursday.

## Symposiums

The 39 symposiums on Thursday, Friday and Saturday were especially created for this meeting. Their aim is to provide in 1,5 hour the various viewpoints on hot issues. The participants should leave the Symposiums and Debates with a fair impression of the dominant line of thought on these issues. As there will be a wide selection of topics, there will be something parallel Symposiums on Thursday and Friday, there will be something of interest for each participant. The symposiums are planned for all participants.

## Courses

The 44 courses have the usual course format with ample possibilities for discussion. This will allow participants to attend four of the courses of their choice during the congress including several popular courses.

## Childhood Glaucoma Track

A full day will be dedicated to childhood glaucoma. For details of all symposiums and courses related to Childhood Glaucoma, see page 149.

## Surgery Track

A full intensive day dedicated to glaucoma surgery, discussing different topics: decision making and laser trabeculoplasty, trabeculectomy, glaucoma drainage devices. For details of all symposiums and courses related to Glaucoma Surgery, see page 149.



## Posters

It should be emphasized that the WGA has purposely chosen scientific posters as the only mode of free, original presentations at the congress. Posters are an excellent and important way of providing scientific information. The WGA is making an effort to provide high visibility for the posters, by declaring them to be the exclusive medium for free presentations. The posters will be on display from Wednesday, July 17, noon until Saturday, July 20, noon.

## Poster Sessions

### TH-1: Thursday July 18.

Time: 1.30 -2.00 pm.

Blood flow

Drug and gene delivery systems

Drug delivery: iris-ciliary body/  
intraocular fluids/posterior segment

Ganglion cell structure and function

Glaucoma: biochemistry and molecular  
biology, genomics and proteomics

Glaucoma: biomechanics

Glaucoma: clinical drug studies and  
clinical trials

Glaucoma: electrophysiology

Glaucoma: epidemiology

Glaucoma: genetics

### TH-2: Thursday July 18.

Time: 3.30 -4.00 pm.

Glaucoma: IOP measurement and  
characterization

Glaucoma: laser therapy

Glaucoma: neuroprotection

Glaucoma: ocular blood flow

Glaucoma: pharmacological  
intervention or cellular mechanism

Glaucoma: structure/function  
relationships

### FR-1: Friday July 19.

Time: 1.30 -2.00 pm.

Glaucoma: surgery or wound healing

### FR-2: Friday July 19.

Time: 3.30-4.00 pm.

Glaucoma: trabecular meshwork and  
ciliary body

Glaucoma: visual fields and  
psychophysics

Glial cells

Health care delivery and economic  
research

Image post processing and analysis  
methodologies

Imaging: glaucoma

Imaging: new technologies and  
techniques

Intraocular pressure/physiology  
pharmacology

Nanomedicine, nanopharmaceuticals,  
nanotherapy

Ocular surface health and disease

Optic nerve

Stem cells

Visual function and quality of life

Additional Posters

## Poster Mounting and Removing

Posters should be mounted on Wednesday, July 17, between 8.00 am and noon.

Assistance and material for mounting the posters will be available from 8.00 am at the Poster desk near the Poster area. Posters should be removed after 1.00 pm and before 3.00 pm on Saturday, July 20. Posters that have not been taken down by the author(s) will be removed and destroyed by the Congress Organizer.

## **Special Attention Flags**

The Program Committee will give special attention flags to posters that have caught the special attention of the members of the Poster Committee.

## **Glaucoma Society Posters**

As in 2007, 2009 and 2011 all Glaucoma Societies were asked to present a poster about their society. This year, the Program Committee asked Glaucoma Societies to create a follow-up to the highly successful Glaucoma Society poster presentation during the WGC in 2011.

These Glaucoma Society Posters describe the major achievements of the Glaucoma Society between July 2011 and July 2013 including meetings, best research, awards, publication, scientific interaction with other WGA member societies, activities for World Glaucoma Week and promulgation.

## **Language**

English.

## Audio Visual Support / Speaker Ready Room

The Speaker Ready Room will be open on the following days and hours:

Tuesday, July 16	4.00 pm	- 6.00 pm
Wednesday, July 17	7.00 am	- 6.00 pm
Thursday, July 18	6.30 am	- 6.00 pm
Friday, July 19	6.30 am	- 6.00 pm
Saturday, July 20	7.00 am	- 12.00 pm

Equipment to enable a final check to be made for your presentation is available in the Speaker Ready Room.

## Power Point presentations

**We strongly advise you to bring your presentation to the Speaker Ready Room AT LEAST 3 HOURS BEFORE** the start of your lecture.

Please note that there are no facilities to use own laptops in the session rooms.

## Travel Grants

The WGA has granted 35 travel grants of € 1,000 for travel support, which include waiving of the registration fee, to glaucoma clinician scientists under forty years of age who have demonstrated a special interest in glaucoma.

## Continuing Medical Education Meeting Evaluation

It is essential for assessing the quality of the WGC that participants take time to complete the online evaluation forms. Every participant can have an impact on the planning for the next WGC. The WGA has purposely created this elaborate evaluation system in order to provide the participants with an even better congress in two years. Your input is highly appreciated.

# FILM FESTIVAL PROGRAM

## WEDNESDAY

Start time		Number	Film Title	Length
10.00 am	1.32 pm	VS01	Non-technical skills for eye surgery <i>(A. Azuara Blanco, UK)</i>	10 min
10.10 am	1.42 pm	VS02	Deep sclerectomy with insertion of a prolene 5/0 segment inside Schlemm's canal <i>(A. Abdelrahman, Egypt)</i>	7 min
10.17 am	1.49 pm	VS03	Lost and found - Ahmed glaucoma valve during implantation <i>(A. Ganguly, India)</i>	6 min
10.23 am	1.55 pm	VS04	Combined cataract and trabeculectomy in subluxated cataracts <i>(A. Ganguly, India)</i>	8 min
10.31 am	2.03 pm	VS05	Glaucoma in phacomatosis pigmentovascularis <i>(A. Mandal, India)</i>	8 min
10.39 am	2.11 pm	VS06	Management of congenital glaucoma associated with stickler syndrome <i>(A. Mandal, India)</i>	8 min
10.47 am	2.19 pm	VS07	Re-implantation of Ahmed glaucoma valve™ (AGVTM) in a case of AGVTM extrusion <i>(A. Roy, India)</i>	8 min
10.55 am	2.27 pm	VS08	Manual small incision cataract surgery in a case of phacolytic glaucoma <i>(D. Pal, India)</i>	5 min
11.00 am	2.32 pm	VS09	Blocking the tube with vicryl... breaking a vicious cycle <i>(D. Pal, India)</i>	4 min
11.04 am	2.36 pm	VS10	Ultrasonic circular cyclo-coagulation in a patient with primary open-angle glaucoma <i>(F. Aptel, France)</i> *	6 min
11.10 am	2.42 pm	VS11	Evolution of an affordable aqueous drainage implant - The Indian Story <i>(G. Puthuran, India)</i> *	8 min
11.18 am	2.50 pm	VS12	Tube repositioning in anterior chamber in tube related complications of aqueous drainage devices <i>(G. Puthuran, India)</i>	8 min

11.26 am	2.58 pm	VS13	Challenge of the tube ( <i>G. Lee, Australia</i> ) *	8 min
11.34 am	3.06 pm	VS14	Ahmed glaucoma valve: Innovations in wound closure with fibrin glue ( <i>J. Shah, India</i> )	8 min
11.42 am	3.14 pm	VS15	Tectonic scleral autograft for treatment of Mitomycin C scleral melting ( <i>J. Mesa Gutierrez, Spain</i> )	6 min
11.48 am	3.20 pm	VS16	Exfoliation and pseudoexfoliation: not "two of a kind" ( <i>J. Mesa Gutierrez, Spain</i> )	8 min
11.56 am	3.28 pm	VS17	Ahmed glaucoma valve(TM) (AGVTM) implantation in iridocorneal endothelial syndrome ( <i>K. Ravi, India</i> )	8 min
12.04 pm	3.36 pm	VS18	Clinical application of anterior segment optical coherence tomography associated with glaucoma surgery ( <i>K. Lee, India</i> )	8 min
12.12 pm	3.44 pm	VS19	Releasable suture - Reining the horse ( <i>M. Khamar, India</i> )	7 min
12.19 pm	3.51 pm	VS20	Where does the aqueous go? ( <i>M. Coote, Australia</i> )	6 min
12.25 pm	3.57 pm	VS21	Implantable Collamer Lens (ICL) explantation with trabeculectomy ( <i>P. Janjarapu, India</i> )	8 min
12.33 pm	4.05 pm	VS22	Phacomorphic glaucoma in nanophthalmos ( <i>P. Janjarapu, India</i> )	7 min
12.40 pm	4.12 pm	VS23	Trabeculectomy with suprachoroidal derivation ( <i>R. Pérez Grossman, Peru</i> )	6 min
12.46 pm	4.18 pm	VS24	Malignant glaucoma: Can it be benign? ( <i>S. Dikshit, India</i> )	8 min
12.54 pm	4.26 pm	VS25	Learn from yesterday, live for today, hope for tomorrow ( <i>S. Banerjee, India</i> )	7 min
1.01 pm	4.33 pm	VS26	Comparison of a valved & non-valved glaucoma drainage device, technique & outcome ( <i>S. Tejwani, India</i> )	8 min
1.09 pm	4.41 pm	VS27	Pediatric glaucoma surgery- Watch out at each step! ( <i>S. Tejwani, India</i> )	8 min

1.17 pm	4.49 pm	VS28	Amniotic membrane transplantation replacing absent conjunctival flap during phacotrabeculectomy <i>(V. Castro, Peru)</i>	7 min
1.24 pm	4.56 pm	VS29	Resolution of bilateral chronic hypotonous maculopathy following fortuitous management of bleb leak with autologous and heterologous donor tissue <i>(V. Pathak-Ray, India)</i>	8 min
1.32 pm	5.04 pm	VS30	Exchange of Ahmed Glaucoma Valve TM (AGV TM) in a Joint Tube in Persistent Plate Exposure <i>(V. Pathak-Ray, India)</i>	8 min

## THURSDAY AND FRIDAY

Start time		Number	Film Title	Length
8.00 am	12.00 pm	VS01	Non-technical skills for eye surgery <i>(A. Azuara Blanco, UK)</i>	10 min
8.10 am	12.10 pm	VS02	Deep sclerectomy with insertion of a prolene 5/0 segment inside Schlemm's canal <i>(A. Abdelrahman, Egypt)</i>	7 min
8.17 am	12.17 pm	VS03	Lost and found - Ahmed glaucoma valve during implantation <i>(A. Ganguly, India)</i>	6 min
8.23 am	12.23 pm	VS04	Combined cataract and trabeculectomy in subluxated cataracts <i>(A. Ganguly, India)</i>	8 min
8.31 am	12.31 pm	VS05	Glaucoma in phacomatosis pigmentovascularis <i>(A. Mandal, India)</i>	8 min
8.39 am	12.39 pm	VS06	Management of congenital glaucoma associated with stickler syndrome <i>(A. Mandal, India)</i>	8 min
8.47 am	12.47 pm	VS07	Re-implantation of Ahmed glaucoma valveTM (AGVTM) in a case of AGVTM extrusion <i>(A. Roy, India)</i>	8 min
8.55 am	12.55 pm	VS08	Manual small incision cataract surgery in a case of phacolytic glaucoma <i>(D. Pal, India)</i>	5 min

*\*Winners WGC-2013 Film Festival*

9.00 am	1.00 pm	VS09	Blocking the tube with vicryl... breaking a vicious cycle ( <i>D. Pal, India</i> )	4 min
9.04 am	1.04 pm	VS10	Ultrasonic circular cyclo-coagulation in a patient with primary open-angle glaucoma ( <i>F. Aptel, France</i> ) *	6 min
9.10 am	1.10 pm	VS11	Evolution of an affordable aqueous drainage implant - The Indian Story ( <i>G. Puthuran, India</i> ) *	8 min
9.18 am	1.18 pm	VS12	Tube repositioning in anterior chamber in tube related complications of aqueous drainage devices ( <i>G. Puthuran, India</i> )	8 min
9.26 am	1.26 pm	VS13	Challenge of the tube ( <i>G. Lee, Australia</i> ) *	8 min
9.34 am	1.34 pm	VS14	Ahmed glaucoma valve: Innovations in wound closure with fibrin glue ( <i>J. Shah, India</i> )	8 min
9.42 am	1.42 pm	VS15	Tectonic scleral autograft for treatment of Mitomycin C scleral melting ( <i>J. Mesa Gutierrez, Spain</i> )	6 min
9.48 am	1.48 pm	VS16	Exfoliation and pseudoexfoliation: not "two of a kind" ( <i>J. Mesa Gutierrez, Spain</i> )	8 min
9.56 am	1.56 pm	VS17	Ahmed glaucoma valve(TM) (AGVTM) implantation in iridocorneal endothelial syndrome ( <i>K. Ravi, India</i> )	8 min
10.04 am	2.04 pm	VS18	Clinical application of anterior segment optical coherence tomography associated with glaucoma surgery ( <i>K. Lee, India</i> )	8 min
10.12 am	2.12 pm	VS19	Releasable suture - Reining the horse ( <i>M. Khamar, India</i> )	7 min
10.19 am	2.19 pm	VS20	Where does the aqueous go? ( <i>M. Coote, Australia</i> )	6 min
10.25 am	2.25 pm	VS21	Implantable Collamer Lens (ICL) explantation with trabeculectomy ( <i>P. Janjarapu, India</i> )	8 min
10.33 am	2.33 pm	VS22	Phacomorphic glaucoma in nanophthalmos ( <i>P. Janjarapu, India</i> )	7 min
10.40 am	2.40 pm	VS23	Trabeculectomy with suprachoroidal derivation ( <i>R. Pérez Grossman, Peru</i> )	6 min

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10.46 am	2.46 pm	VS24	Malignant glaucoma: Can it be benign? <i>(S. Dikshit, India)</i>	8 min
10.54 am	2.54 pm	VS25	Learn from yesterday, live for today, hope for tomorrow <i>(S. Banerjee, India)</i>	7 min
11.01 am	3.01 pm	VS26	Comparison of a valved & non-valved glaucoma drainage device, technique & outcome <i>(S. Tejwani, India)</i>	8 min
11.09 am	3.09 pm	VS27	Pediatric glaucoma surgery- Watch out at each step! <i>(S. Tejwani, India)</i>	8 min
11.17 am	3.17 pm	VS28	Amniotic membrane transplantation replacing absent conjunctival flap during phacotrabeculectomy <i>(V. Castro, Peru)</i>	7 min
11.24 am	3.24 pm	VS29	Resolution of bilateral chronic hypotonous maculopathy following fortuitous management of bleb leak with autologous and heterologous donor tissue <i>(V. Pathak-Ray, India)</i>	8 min
11.32 am	3.32 pm	VS30	Exchange of Ahmed Glaucoma Valve TM (AGV TM) in a Joint Tube in Persistent Plate Exposure <i>(V. Pathak-Ray, India)</i>	8 min

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9.10 am	VS11	Evolution of an affordable aqueous drainage implant - The Indian Story ( <i>G. Puthuran, India</i> ) *	8 min
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# THE WORLD GLAUCOMA ASSOCIATION

## THE GLOBAL GLAUCOMA NETWORK

The WGA is an independent, impartial, ethical, global organization for glaucoma science and care.

### Core Purpose

To eliminate glaucoma-related disability worldwide.

### Core Values

The leadership and member societies of WGA are committed to acting consistently with the following values:

- Responsibility (Accountability) - to each other, to member societies, to the larger global glaucoma community, to the patient and to the public
- Consensus - open communication, inclusion of diverse viewpoints, and the aspiration to achieve practical consensus before acting
- Collegiality and Mutual Respect
- Best Care and Service - advancing the best care available to glaucoma patients worldwide

### Goals

- **Goal 1 - Education**  
The WGA will be an important source of education for ophthalmologists and other healthcare providers related to glaucoma.
- **Goal 2 - WGC**  
The WGC will be the best glaucoma meeting in the world.
- **Goal 3 - Public Awareness and Recognition of Glaucoma**  
Public awareness and recognition of glaucoma will increase.
- **Goal 4 - Impact in Developing Countries**  
The resources of the global glaucoma community - including individuals, member societies, industry, governments, NGOs and patients - will be integrated and leveraged to enhance glaucoma care, particularly in developing countries.
- **Goal 5 - Technology**  
The WGA will use information/communication technologies as a key tool in achieving its goals.
- **Goal 6 - Organization**  
The WGA will be financially sound and organized to lead the glaucoma community.

## **GLAUCOMA SOCIETIES**

### **National Glaucoma Societies or related groups from the following countries:**

Algeria, Argentina, Austria, Azerbaijan, Bangladesh, Belgium, Bolivia, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Croatia, Czech Republic, Denmark, Ecuador, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Guatemala, Hungary, Iceland, Indonesia, Iran, Ireland, Israel, Italy, Korea, Latvia, Lesotho, Lithuania, Mexico, Netherlands, Nigeria, Norway, Panama, Pakistan, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Rumania, Russia, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Ukraine, Uruguay, United Kingdom, Venezuela, Zambia.

### **Regional Glaucoma Societies**

African Glaucoma Task Force  
American Glaucoma Society  
Asia Pacific Glaucoma Society  
Australian and New Zealand Glaucoma Interest Group  
Canadian Glaucoma Society  
Chinese Glaucoma Society  
European Glaucoma Society  
Glaucoma Society of India  
Japan Glaucoma Society  
Latin-American Glaucoma Society  
Middle East African Glaucoma Society  
Pan American Glaucoma Society

### **Supranational Glaucoma Societies**

Optometric Glaucoma Society  
International Society for Glaucoma Surgery

### **Glaucoma Industry Members**

Alcon Laboratories, Inc.  
Allergan, Inc.  
MSD (Merck & Co)

### **Associate Glaucoma Industry Members**

Carl Zeiss Meditec, Inc.  
Heidelberg Engineering GmbH  
Santen Pharmaceutical Co., Ltd  
Topcon Medical Systems



## **Supporting Glaucoma Industry Members**

Aeon Astron Europe B.V.  
Bausch+Lomb  
EyeTechCare S.A.  
Glaukos Corporation  
Haag Streit AG  
Icare Finland Oy  
Lumenis Vision  
NeoMedix Corporation  
Oculus Optikgeräte GmbH  
Optovue, Inc.  
Otsuka  
Senju  
Sensimed AG  
Ziemer Ophthalmic Systems

## **Global WGA Directory of Glaucoma Societies**

The WGA has identified 80 Glaucoma Societies and has compiled a Global WGA Directory of Glaucoma Societies, which includes basic information on the Glaucoma Society. The Directory, amongst others, includes information on:

- o Society Name (if regional society list partner societies and groups)
- o Officers (+ Contact information)
- o Administrator
- o Headquarters Address
- o Contact Information

## **World Glaucoma Patient Organization**

At the initiative of the WGA, a Global Glaucoma Patient Organization was founded in October 2004, New Orleans, LA, US. The aim of the organization is a further cooperation between national and regional Glaucoma Patient Organizations. Contacts between the WGPA and the WGA are formalized through the World Glaucoma Week Committee.

## Membership WGA

The WGA is an association of Glaucoma Societies. It has no individual members. New or undiscovered Glaucoma Societies that desire to become a member of the WGA are asked to contact the WGA Executive Office through [info@worldglaucoma.org](mailto:info@worldglaucoma.org). The involvement in the WGA of the Glaucoma Societies is planned to be through:

1. Joining of forces, cooperation, coordination of efforts in order to improve quality of glaucoma science and care
2. Meeting and communicating in the Global Assembly, WGC, Informal Exchange Meetings (twice a year), Committees activities, special ad hoc meetings
3. Distribution of information through International Glaucoma Review, WGC, Consensus Outcomes and Guidelines, publications
4. Participation in the Consensus & Guidelines process
  - 4.1 Preparation
  - 4.2 Meeting
  - 4.3 Publication
  - 4.4 Promulgation
5. Cooperation in development of Glaucoma Patient Organizations
6. Improving glaucoma curriculum in ophthalmology training
7. Training of glaucoma sub specialists / fellowships
8. Glaucoma Society Organization
  - 8.1 Support in developing an even more effective organization
  - 8.2 Training in
    - 8.2.1 Organization of societies
      - 8.2.1.1 Development
      - 8.2.1.2 Management
      - 8.2.1.3 Communication
      - 8.2.1.4 Leadership development
    - 8.2.2 Organization of congresses/ meetings
    - 8.2.3 Development of educational programs
    - 8.2.4 Manual on glaucoma (Guidelines from EGS, AAO, JGS and others)
  - 8.3 Advocacy; prevention of blindness, support for eye care
  - 8.4 Critical research: necessary clinical studies, access to care
  - 8.5 Availability of Project Forum for internet discussions within each national Glaucoma Society.

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*The World Glaucoma Association is an  
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## **WGA RESEARCH AWARDS**

History: The Research Awards from the World Glaucoma Association are the only global glaucoma research awards supported by all member Glaucoma Societies. The award was started in 1999 as the IGR Award, later called AIGS-Award, and now called the WGA Research Award. More information about award winners is available via the WGA website.



## INTERNATIONAL GLAUCOMA REVIEW

The International Glaucoma Review (IGR), which has been published since 1984, became the official journal for the WGA in 2002. IGR is a journal for glaucoma specialists and general ophthalmologists with an interest in glaucoma from all over the world, and is a forum for the world's Glaucoma Societies. The IGR is distributed four times per year to all members of the member Glaucoma

Societies of the WGA without charge. Subscriptions of each Glaucoma Society Member to IGR are supported by a grant from the WGA and through advertising.

IGR has the most complete collection of abstracts from the glaucoma literature, some of which is not readily available. It is the only journal that presents a three-monthly critical review of selected glaucoma literature. IGR also contains the Glaucoma Dialogue, the Glaucoma Opinion, and reports from the member Glaucoma Societies. It may also include reports of meetings, interviews, hypotheses, reviews, and anything else considered to be of interest to the members of the Glaucoma Societies.

### IGR online Database

Abstracts have been provided online only since 2007, and all abstracts published in IGR since 1999 are already available through the fully searchable IGR glaucoma literature database. But that's not all. The comments from the Editor's Selection have also been put into a database and are also fully searchable and linked to the abstracts. This makes it possible to read what experts have to say about important abstracts.

### Registration for IGR online

Access to IGR Online remains complimentary for all members of glaucoma societies associated with the WGA. However, you are required to register before you can access the abstracts and make use of other features of the IGR website.

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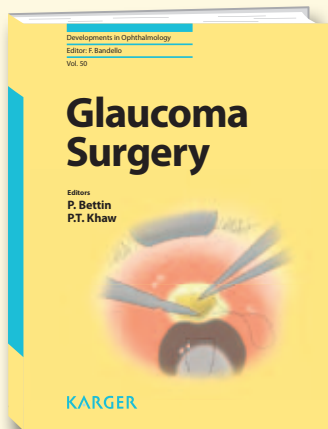
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**Paolo Bettin, Peng Tee Khaw**

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In this volume of *Developments in Ophthalmology*, a panel of renowned glaucoma surgeons reports its findings and the updated evidence-based literature data on indications, outcomes, pearls and pitfalls of techniques in which they all have an undisputable 'hands-on' everyday experience.

The publication begins with chapters on conventional procedures, i.e. trabeculectomy (still the gold standard), deep sclerectomy, and glaucoma drainage device implantation explicitly focusing on postoperative management. The role of the ocular surface in glaucoma surgery and the issue of wound healing and its modulation through antimetabolites are further discussed. In the second part, the attention shifts to new techniques which still have a marginal role, but are promising for particular indications. In the last part, the greatest challenges of glaucoma surgery such as the surgical approach to angle closure, concomitant glaucoma and cataract as well as pediatric glaucoma are discussed in detail. Finally, the last chapter is dedicated to cyclodestructive techniques.

This volume is recommended to glaucoma surgeons and glaucoma specialists seeking information on the best therapy for their patients, but also to general ophthalmologists who refer their patients for surgery or follow them up afterwards.

## **Developments in Ophthalmology, Vol. 50**

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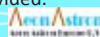
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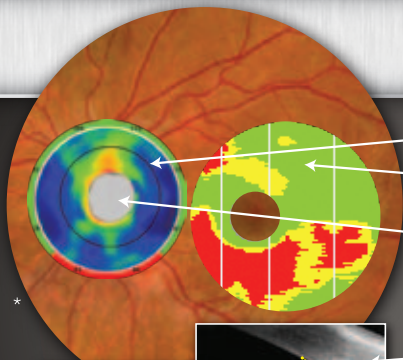
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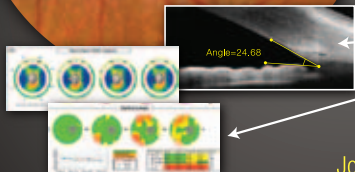
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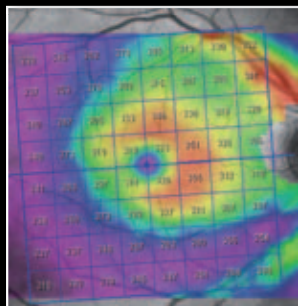
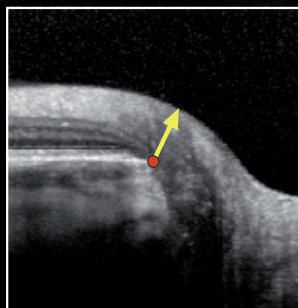
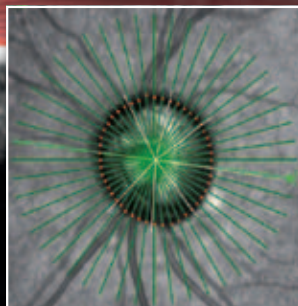
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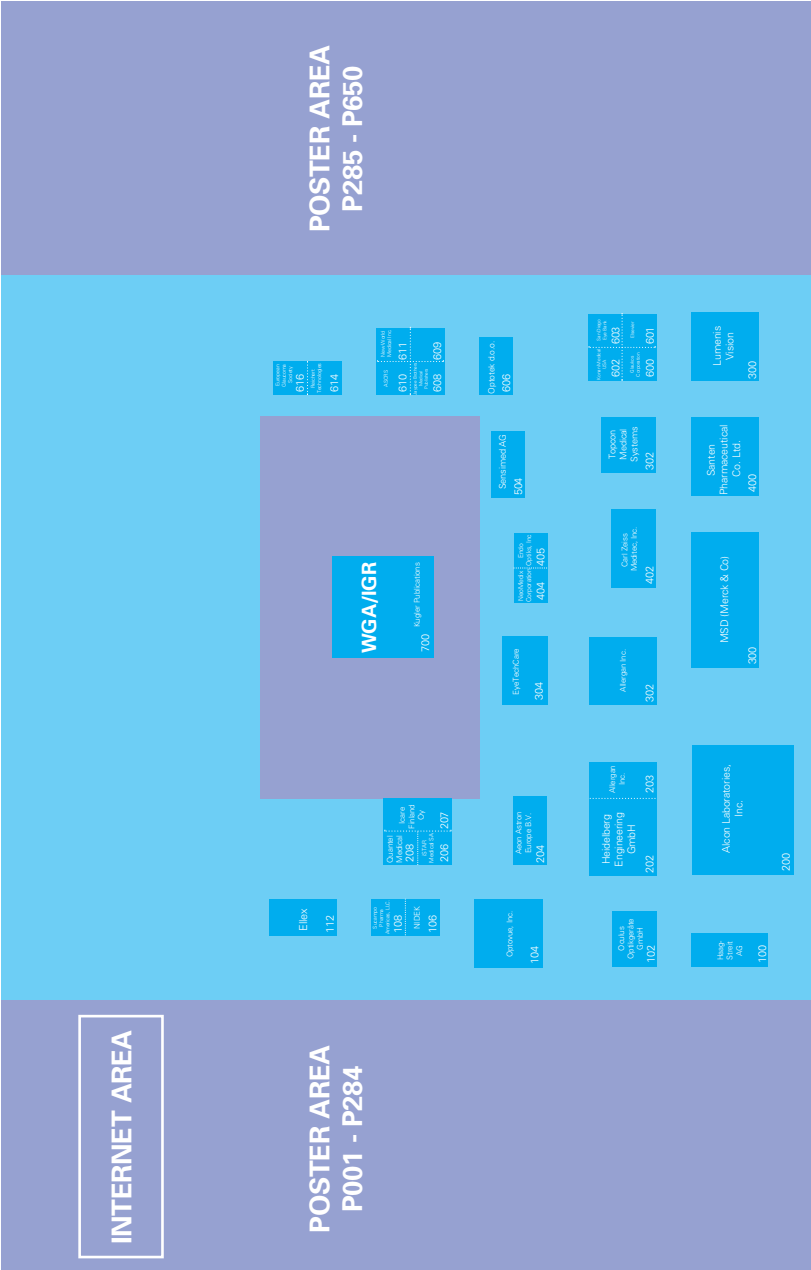
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### **608 Jaypee Brothers Medical Publishers**

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**602 Konan Medical USA**

15 Marconi, Suite A  
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Drop by our booth to for the WGA Consensus Series and many other publications in Glaucoma or Ophthalmology. We are also interested to discuss your publications ideas.



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## **500 Lumenis Vision**

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### 404 NeoMedix Corporation

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NeoMedix is focused on manufacturing and distribution of advance medical products such as the Trabectome. Trabectome is an FDA-cleared device for micro incisional surgical treatment of glaucoma. Clinical data up to 72 months of over 4000 patients has shown to safely and effectively lower IOP on average 30% with minimal complications.

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### 611 New World Medical Inc.

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New World Medical Inc. has the mission to fulfill patient needs through the safe and effective medical devices, complying with regulatory requirements and quality system procedures.

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### **106 Nidek**

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### **102 Oculus Optikgeräte GmbH**

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## **208 Quantel Medical**

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## **614 Reichert Technologies**

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### **603 San Diego Eye Bank**

9246 Lightwave Ave.,  
Suite 120  
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Contact: Mike Peterson  
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## **400 Santen Pharmaceutical Co., Ltd.**

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Headquartered in Japan with operations also in the US, Asia, and Europe, Santen is a leader in ophthalmic research, development, regulatory management, and marketing. Our global vision is to develop innovative products to serve the needs of people worldwide. Santen's strategic focus is "glaucoma", "cornea" and "retina". The company will continue to contribute to society, working primarily for the benefit of patients and their loved ones throughout the world.



**SENSIMED  
Triggerfish**

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## **504 Sensimed AG**

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Sensimed AG is a Swiss medical device company that has developed a paradigm shift in ophthalmology and a step forward in personalized medicine for glaucoma patient. The SENSIMED Triggerfish® is a portable system including a soft contact lens with an embedded microelectronic sensor. It is indicated for continuous intraocular pressure (IOP) monitoring up to 24 hours in glaucoma patients at risk of progression. The device records the IOP pattern during the monitoring time.

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## **108 Sucampo Pharma Americas, LLC**

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## **502 Topcon Medical Systems**

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# PROGRAM AT A GLANCE

## WEDNESDAY, JULY 17, 2013

Room	Ballroom AB	109-110	118-120	211-214	220-222	121-122	202-203
8.00 am - 9.45 am		European Glaucoma Society Symposium	Glaucoma Society of India Symposium	American Glaucoma Society Symposium	Pan- American & Latin American Glaucoma Society Joint Symposium	Chinese Glaucoma Society Symposium	Optometric Glaucoma Society Symposium
	BREAK - FOYER BALLROOM AB						
10.00 am - 11.45 am	CANADIAN GLAUCOMA SOCIETY PLENARY SYMPOSIUM						
12.00 am - 12.45 am							
	LUNCH - FOYER BALLROOM AB						
2.00 pm - 3.00 pm	GLOBAL ASSEMBLY						
	BREAK - FOYER BALLROOM AB						
3.30 pm - 5.30 pm	OPENING CEREMONY						
5.30 pm - 7.00 pm	WELCOME RECEPTION - FOYER BALLROOM AB						

205-206	208-209	217-219	114-115	116-117	204	207	210	Room
Japan - Taiwan Glaucoma Society Joint Symposium	International Society for Glaucoma Surgery Symposium	Korean Glaucoma Society Symposium	Israel Glaucoma Society Symposium	Portuguese Glaucoma Society Symposium	Bulgarian Glaucoma Society Symposium	Pakistan Glaucoma Association Symposium	Bangladesh Glaucoma Society Symposium	8.00 am - 9.45 am
	BREAK - FOYER BALLROOM AB							
							WGC FILM FESTIVAL	10.00 am - 11.45 am
								12.00 am - 12.45 am
	LUNCH - FOYER BALLROOM AB							
							WGC FILM FESTIVAL	2.00 pm - 3.00 pm
	BREAK - FOYER BALLROOM AB							
							WGC FILM FESTIVAL	3.30 pm - 5.30 pm
WELCOME RECEPTION - FOYER BALLROOM AB								5.30 pm - 7.00 pm

# THURSDAY, JULY 18, 2013

## CHILDHOOD GLAUCOMA TRACK

Room	Ballroom AB	109-110	118-120	211-214	220-222	121-122	202-203
7.00 am - 8.00 am							SYMPOSIUM Icare Finland Oy
8.00 am - 9.30 am	<b>S01</b> Unmet needs in Glaucoma	<b>S02</b> Biomechanics of the eye	<b>S03</b> Laser trabecu- loplasty for open angle Glaucoma	<b>S04</b> Novel Diagnostic Targets in Glaucoma	<b>S05</b> AAB: Fixing Glaucoma worldwide		
	BREAK - EXHIBITION HALL						
10.00 am - 11.30 am	<b>S06</b> Current controversies in Glaucoma	<b>S07</b> Imaging technology advances	<b>S08</b> Ocular perfu- sion pressure	<b>S09</b> Angle closure Glaucoma	<b>S10</b> Of mice and men	<b>S11</b> Glaucoma surgery in children	
	BREAK - FOYER BALLROOM AB						
12.00 am - 1.00 pm		LUNCH SYMPOSIUM Alcon Laboratories Inc.	LUNCH SYMPOSIUM Alcon Laboratories Inc.				
	BREAK - EXHIBITION HALL						
2.00 pm - 3.30 pm	<b>S12</b> Advances in Functional testing for early detection of Glaucoma	<b>S13</b> Advances in Glaucoma Genetics	<b>S14</b> Pediatric Glaucoma: Highlights from the WGA Consensus Meeting	<b>S15</b> Lifestyle choices for the Glaucoma patient	<b>S16</b> RGC and Glial in health and disease		
	BREAK - EXHIBITION HALL						
4.00 pm - 5.00 pm	<b>C01</b> Gaucoma Drainage Devices 1 - optimizing outcomes	<b>C02</b> Evaluation of visual fields	<b>C03</b> Glaucoma therapies and ocular surface diseases	<b>C04</b> How to detect and confirm progression and use it to manage GL	<b>C05</b> Diagnosis of Childhood Glaucoma in Infancy	<b>C06</b> Advanced Imaging techniques for anterior chamber & angle evaluation	<b>C07</b> Principles of medical therapy in Glaucoma practice
5.00 pm - 6.00 pm	<b>C13</b> Glaucoma drainage devices - part 2 - advanced techniques	<b>C14</b> Decision making after failed trab	<b>C15</b> Tonometry and corneal biomechanics	<b>C16</b> Cataract surgery and then Glaucoma surgery	<b>C17</b> Fundamentals for gonioscopy	<b>C18</b> Treatment of congenital and infantile Glaucoma	<b>C19</b> Emerging GL surgery-1 (ab externo) theory and techniques
6.00 pm - 7.00 pm		SYMPOSIUM Alcon Laboratories Inc.				SYMPOSIUM EyeTechCare	SYMPOSIUM Aeon Astron Europe B.V.

205-206	208-209	217-219	114-115	116-117	204	210	Room
			SYMPOSIUM Glaukos Corporation				7.00 am - 8.00 am
						WGC-2013 FILM FESTIVAL	8.00 am - 9.30 am
BREAK - EXHIBITION HALL							
						WGC-2013 FILM FESTIVAL	10.00 am - 11.30 am
BREAK - FOYER BALLROOM AB							
						WGC-2013 FILM FESTIVAL	12.00 am - 1.00 pm
BREAK - EXHIBITION HALL							
						WGC-2013 FILM FESTIVAL	2.00 pm - 3.30 pm
BREAK - EXHIBITION HALL							
<b>C08</b> A new addition to the Glaucoma management team - The Patient	<b>C09</b> Trabeculectomy pearls and pitfalls	<b>C10</b> Expert techniques for small pupils and weak zonules	<b>C11</b> How to design and publish Glaucoma studies	<b>C12</b> Normal Tension Glaucoma - a systematic approach			4.00 pm - 5.00 pm
<b>C20</b> Understanding the genetic basis of GL	<b>C21</b> Glaucoma and myopia	<b>C22</b> Laser surgery for OAG	<b>C23</b> Clinical optic disc evaluation	<b>C24</b> Clinicals trials and evidence-based Glaucoma	<b>C25</b> New developments in perimetry		5.00 pm - 6.00 pm
							6.00 pm - 7.00 pm

# FRIDAY, JULY 19, 2013

## SURGERY TRACK

Room	Ballroom AB	109-110	118-120	211-214	220-222
7.00 am - 8.00 am					
8.00 am - 9.30 am	<b>S17</b> Identifying glaucoma progression	<b>S18</b> Cataract Plus: Adding Glaucoma Surgery	<b>S19</b> Exfoliation Syndrome and Exfoliative Glaucoma	<b>S20</b> Risk factors for Glaucoma onset and progression	<b>S21</b> Considerations for initial treatment of Glaucoma
	BREAK - EXHIBITION HALL				
10.00 am - 11.30 am	<b>S22</b> Glaucoma Surgery: Complications & rescue operations	<b>S23</b> Challenges of medical therapy	<b>S24</b> Clinician Scientist Symposium: Challenges for researchers in Glaucoma	<b>S25</b> Impact of functional impairment from Glaucoma: enhancing Visual performance in patients with Glaucoma	<b>S26</b> Glaucoma care in the developing world
	BREAK - FOYER BALLROOM AB				
12.00 am - 1.00 pm	LUNCH SYMPOSIUM MSD (Merck & Co) & Santen				
	BREAK - EXHIBITION HALL				
2.00 pm - 3.30 pm	<b>S27</b> Glaucoma Grand Rounds	<b>S28</b> Epidemiology and screening for Glaucoma	<b>S29</b> IOP around the clock (Measurement and Significance)	<b>S30</b> Aqueous Drainage Devices	<b>S31</b> Glaucoma and African Ancestry
	BREAK - EXHIBITION HALL				



121-122	217-219	114-115	116-117	210	Room
SYMPOSIUM Sensimed AG	SYMPOSIUM Heidelberg Engineering GmbH	SYMPOSIUM Haag Streit AG	Breakfast Alcon Laboratories Inc. 06.30 - 7.45 (Invitation only)		7.00 am - 8.00 am
				WGC-2013 FILM FESTIVAL	8.00 am - 9.30 am
BREAK - EXHIBITION HALL					
				WGC-2013 FILM FESTIVAL	10.00 am - 11.30 am
BREAK - FOYER BALLROOM AB					
				WGC-2013 FILM FESTIVAL	12.00 am - 12.45 am
BREAK - EXHIBITION HALL					
				WGC-2013 FILM FESTIVAL	2.00 pm - 3.30 pm
BREAK - EXHIBITION HALL					

# FRIDAY, JULY 19, 2013

## SURGERY TRACK

Room	Ballroom AB	109-110	118-120	211-214	220-222	121-122
4.00 pm - 5.00 pm	<b>C26</b> Emerging GL surgery-1 (ab interno) theory and techniques	<b>C27</b> Advances in understanding and management of angle closure (in cooperation with APGS)	<b>S32</b> Slit lamp surgical techniques in Glaucoma Care	<b>C28</b> Imaging 1: Basic technology and diagnosis	<b>C29</b> Glaucoma Epidemiology Prevalence and Diagnosis	<b>C30</b> Understanding exfoliation syndrome and ex-foliation glaucoma
5.00 pm - 6.00 pm	<b>S33</b> What is new in glaucoma surgery		<b>C35</b> Non penetrating Glaucoma surgery	<b>C36</b> Imaging 2: Progression and management	<b>C37</b> Tips from experts: How to make your trabeculectomy work	<b>C38</b> Wound healing and post-operative bleb management
7.30 pm - 11.00 pm	WGC CONGRESS DINNER - VANCOUVER AQUARIUM					

202-203	205-206	208-209	217-219	114-115	116-117	Room
<b>C31</b> Cyclophoto-coagulation: Why, when and how?		<b>C32</b> Blood flow in glaucoma	<b>C33</b> Glaucoma management and education in the developing world	<b>C34</b> Generic drugs in Glaucoma		4.00 pm - 5.00 pm
<b>C39</b> Glaucoma Health Economics	<b>C40</b> Secondary angle closure: Diagnosis & management	<b>C41</b> "World Glaucoma Week" - Birth and Growth of a Glaucoma Awareness Movement	<b>C42</b> Neuro-protection & apoptosis of retinal ganglion cells related to GL	<b>C43</b> Management of complex glaucomas	<b>C44</b> First steps of becoming an effective mentor	5.00 pm - 6.00 pm
WGC CONGRESS DINNER - VANCOUVER AQUARIUM						7.30 pm - 11.00 pm

# SATURDAY, JULY 20, 2013

Room	Ballroom AB	109-110	118-120	205-206	210
7.00 am - 8.00 am				SYMPOSIUM Oculus Optikgerate GmbH	
8.00 am - 9.30 am	<b>S34</b> What's Hot in Glaucoma	<b>S35</b> Stem Cells and regenerative medicine	<b>S36</b> Neuroimaging of Glaucoma		WGC-2013 FILM FESTIVAL
	BREAK - EXHIBITION HALL				
10.00 am - 11.30 am	<b>S37</b> Surgical Grand Rounds	<b>S38</b> Targeting Aqueous Outflow	<b>S39</b> Biomarkers in Glaucoma		WGC-2013 FILM FESTIVAL

# CHILDHOOD GLAUCOMA & GLAUCOMA SURGERY TRACKS

The following sessions are dedicated to Childhood Glaucoma:

## Childhood Glaucoma Track

Thursday July 18

8.00 am - 9.30 am	S01 - Unmet needs in Glaucoma
10.00 am - 11.30 am	S11 - Glaucoma surgery in children
2.00 pm - 3.30 pm	S14 - Pediatric Glaucoma: Highlights from the WGA Consensus Meeting
4.00 pm - 5.00 pm	C05 - Diagnosis of Childhood Glaucoma in Infancy
5.00 pm - 6.00 pm	C18 - Treatment of congenital and infantile Glaucoma

The following sessions are dedicated to Glaucoma Surgery:

## Glaucoma Surgery Track

Friday July 19

8.00 am - 9.30 am	S18 - Cataract Plus: Adding Glaucoma Surgery
10.00 am - 11.30 am	S22 - Glaucoma Surgery: Complications & Rescue operations
2.00 pm - 3.00 pm	S30 - Aqueous Drainage Devices
4.00 pm - 5.00 pm	C26 - Emerging GL surgery-1 (ab interno) theory and techniques
4.00 pm - 5.00 pm	S32 - Slit Lamp Surgical Techniques in Glaucoma Care
4.00 pm - 5.00 pm	C31- Cyclophotocoagulation: Why, when and how?
5.00 pm - 6.00 pm	S33 - Whats new in glaucoma surgery
5.00 pm - 6.00 pm	C35 - Non penetrating Glaucoma surgery
5.00 pm - 6.00 pm	C37 - Tips from experts: How to make your trabeculectomy work





## NOTES

[illegible]







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