WELCOME MESSAGES

It is my pleasure to warmly welcome you to the Glaucoma Research Society meeting in Parma. The GRS is a vital research organization and its biennial meeting provides delegates a rich and valuable environment for scientific discourse.

The Program Committee, co-chaired by Hani Levkovitch-Verbin and Fotis Topouzis, has composed a superb program that will be the nucleus for intensive discussions. I want to draw your attention to the Glaucoma Definition workshop that will take up the bulk of the program on August 30. With this workshop, the GRS has an excellent opportunity to make an important contribution to the ophthalmology and vision science community.

The Executive is especially grateful to Stefano Gandolfi, our meeting host, who has made enormous efforts to ensure we have the best possible meeting environment and a wonderful social program. We are also indebted to the meeting organizer, OIC, and the excellent staff in charge of the operational details.

Finally, I want to strongly encourage all members to attend the Business Meeting on August 31. Going forward, the GRS has many important decisions to make for which your input is critical.

I look forward to seeing you in Parma!

Balwantray Chauhan
GRS President

I am glad and honoured to welcome the GRS to my home town. When we decided to present the nomination of Parma, we had a motto: “the walking-distance place for a family-feeling meeting.” Parma will embrace you in its historical medieval core, where you will be able to reach any destination within just a few minutes walk. Every day, upon completion of our sessions in the “Aula Magna,” of one of the most ancient Italian Universities, we discover Parma within its territory. After experiencing its world of culture, music and history, you will feel like discovering a little and genuine pearl in an unsuspected oyster. Even the more conventional shopping time will be quite an experience after strolling through the multiple artwork shops and “botteghe” lined along the narrow lanes of the city center. And (last but not least), we will tickle your taste buds with our tempting cuisine throughout the meeting, from the buffets to the dinners.

Benvenuti a Parma.

Stefano Gandolfi
Local Host
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EXECUTIVE COMMITTEE

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Keith Martin
Linda Zangwill

Local Host
Stefano Gandolfi

Under the Auspicies of
SPEAKERS AND MODERATORS

Makoto Aihara, Japan
Wallace L.M. Alward, USA
Tin Aung, Singapore
Augusto Azuara-Blanco, United Kingdom
Claude F. Burgoyne, USA
Joseph Caprioli, USA
Balwantray Chauhan, Canada
George Cioffi, USA
Jamie Craig, Australia
Jonathan G. Crowston, Australia
Adriana Di Polo, Canada
C. Ross Ethier, USA
John Fingert, USA
Paul J. Foster, United Kingdom
David S. Friedman, USA
Stefano Gandolfi, Italy
David Garway-Heath, United Kingdom
Michael Girard, Singapore
Ivan Goldberg, Australia
Franz Grus, Germany
Neeru Gupta, Canada
Anders Heijl, Sweden
Donald C. Hood, USA
Henry Jampel, USA
Peng T. Khaw, United Kingdom
Anthony Khawaja, United Kingdom
Tae-Woo Kim, Korea
Christopher Leung, Hong Kong
Leonard Levin, Canada
Hani Levkovitch-Verbin, Israel
Jeffrey M. Liebmann, USA
Vijaya Lingam, India
Keith Martin, United Kingdom
Felipe Medeiros, USA
James E. Morgan, United Kingdom
Toru Nakazawa, Japan
Kouros Nouri-Mahdavi, USA
Ki Ho Park, Korea
Louis R. Pasquale, USA
Norbert Pfeiffer, Germany
Harry Quigley, USA
Pradeep Y. Ramulu, USA
Alan Robin, USA
Ursula Schlötzer-Schrehardt, Germany
Leopold Schmetterer, Singapore
Joel S. Schuman, USA
Ramanjit Sihota, India
Ravi Thomas, Australia
Fotis Topouzis, Greece
Anja Tuulonen, Finland
Ananth C. Viswanathan, United Kingdom
Robert N. Weinreb, USA
Janey L. Wiggs, USA
M. Roy Wilson, USA
Linda Zangwill, USA
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SESSION 1: GLAUCOMA GENETICS – PRESENT AND FUTURE
Chairs: Louis R. Pasquale, Janey L. Wiggs

08.30 POAG-GWAS - Current genomics and next steps
Janey L. Wiggs

08.50 PACG genomic associations and disease mechanism
Tin Aung

09.10 Exfoliation syndrome genomics - Contributions of common and rare variants
Ursula Schlötzer-Schrehardt

09.30 Big data and genomics - Studies from the UK Biobank
Paul J. Foster

09.50 Novel gene discovery for early-onset glaucoma
Jamie Craig

10.10 Normal tension glaucoma genes
John Fingert

10.30 Break

SESSION 2: DEFINING GLAUCOMA IN THE 21ST CENTURY
Chairs: Hani Levkovitch-Verbin, Fotis Topouzis

11.00 Why we need to reconsider a glaucoma definition for research
Harry Quigley

11.20 Defining functional damage
Balwantray Chauhan

11.40 Defining structural damage
Claude F. Burgoyne

12.00 Using cut-offs helps in standardization
Christopher Leung

12.20 Using cut-offs ignores normal variability and the different glaucoma phenotypes
M. Roy Wilson

12.40 Lunch
SESSION 3 - WORKSHOP: DEFINING GLAUCOMA IN THE 21ST CENTURY

Chairs: Harry Quigley, Ravi Thomas

Introduction to Workshop (6 breakout groups with facilitator)

Harry Quigley

Group 1: How many levels/categories should there be in the definition of structural damage?
Facilitator: Vijaya Lingam
Sala del Consiglio

Group 2: What is the role of clinical examination of the optic disc and retina?
Facilitator: Ramanjit Sihota
Aula dei Filosofi

Group 3: What OCT features should be in the definition?
Facilitator: Ki Ho Park
Aula dei Cavalieri

Group 4: What visual field features should be in the definition?
Facilitator: Stefano Gandolfi
Aula 1

Group 5: Do OCT and visual field features have to match?
Facilitator: George Cioffi
Aula 2

Group 6: What methods should be used to validate the definition system?
Facilitator: Peng T. Khaw
Aula della Bandiera

INDIVIDUAL GROUP PRESENTATIONS AND DISCUSSIONS

Adjourn
SESSION 4: RESCUE THE OPTIC NERVE – CURRENT STATUS AND FUTURE DIRECTIONS
Chairs: Keith Martin, Norbert Pfeiffer

08.00  Scleral stiffening and glaucoma – A novel approach  
       C. Ross Ethier

08.20  Seeing is believing – Live imaging of microvascular pathology in  
       glaucoma  
       Adriana Di Polo

08.40  Gene therapy for rescuing RGCs in glaucoma  
       Keith Martin

09.00  Learning from the brain – Novel approaches in neurodegeneration  
       Leonard Levin

09.20  Proteomic approach for RGC survival  
       Franz Grus

09.40  Barriers for neuroprotection in glaucoma  
       Hani Levkovitch-Verbin

10.00  Break

SESSION 5: GOLDMANN LECTURE

10.30  Introduction  
       Balwantray Chauhan

10.35  My 30-year journey with a myocilin glaucoma family: from clinic to lab to clinic  
       Wallace L.M. Alward
SESSION 6: OPTIC NERVE RECOVERY AND VULNERABILITY TO INJURY

Chairs: Jonathan G. Crowston, Neeru Gupta

11.00 Managing patients with very vulnerable nerves – glaucoma in patients with low presenting IOP
Makoto Aihara

11.20 Neuroplasticity in the inner plexiform layer
James E. Morgan

11.40 Visual field improvement in the clinic – What is fact and what is fiction?
Joseph Caprioli

12.00 Can RGC vulnerability to injury be modified?
Jonathan G. Crowston

12.20 BUSINESS MEETING

13.10 Lunch
SESSION 7: STATISTICAL MODELING TO PREDICT OR DETECT PROGRESSION  
Chairs: David Garway-Heath, Linda Zangwill

08.30  Statistical modeling of the retinal nerve fiber layer to predict progression  
Linda Zangwill

08.50  Predictors for glaucoma and glaucoma progression  
Anthony Khawaja

09.10  Identification of fast progressors  
Kouros Nouri-Mahdavi

09.30  Research approaches and opportunities  
Donald C. Hood

09.50  From statistics to chairside in the exam room  
Henry Jampel

10.10  Break

SESSION 8: VISUAL FIELD IMAGING AND ENDPOINTS IN CLINICAL TRIALS  
Chairs: Anders Heijl, Felipe Medeiros

10.40  When is a biomarker a valid surrogate endpoint? Considerations for clinical trials in glaucoma  
Felipe Medeiros

11.00  Event- versus trend-based progression endpoints in clinical trials – Clinical relevance and sample size considerations  
David Garway-Heath

11.20  Applications and limitations of visual field endpoints  
Ananth C. Viswanathan

11.40  Applications and limitations of imaging endpoints  
Jeffrey M. Liebmann

12.00  Lunch
SESSION 9: THE FUTURE OF IMAGING – NEXT GENERATION HARDWARE AND DEEP LEARNING
Chairs: Leopold Schmetterer, Robert N. Weinreb

13.00  Why do we need novel imaging techniques in glaucoma?
Toru Nakazawa

13.20  Next generation OCT
Joel S. Schuman

13.40  Deep learning for OCT data
Michael Girard

14.00  Potential of OCT angiography
Tae-Woo Kim

14.20  Hurdles in implementing deep learning
Leopold Schmetterer

14.40  Break

SESSION 10: PATIENT RELATED OUTCOMES – SELECTION, STANDARDIZATION AND IMPLEMENTATION
Chairs: David S. Friedman, Pradeep Y. Ramulu

15.10  What patient related outcomes (PRO) tell us that clinical measures cannot
Ivan Goldberg

15.30  Why are there so many PROs
Alan Robin

15.50  Analyzing PROs - Are we doing a good job?
Anja Tuulonen

16.10  A universal PRO is possible, and this is what it would look like
Augusto Azuara-Blanco

16.30  A universal PRO is impossible because of these challenges
Pradeep Y. Ramulu

16.50  Meeting adjourns
GENERAL INFORMATION

Meeting Location
The GRS 2018 meeting will be held in the main building of the University of Parma. The University is located in the heart of the city, just a few minutes by foot from the Parma central train station.

University of Parma
Via Università, 12 - 43121 Parma (Italy)
en.unipr.it

Meeting Rooms
All Main Sessions will be held in the Aula Magna (Plenary Hall), while the Workshop scheduled on Thursday will take place in the following rooms:

- Group 1: Sala del Consiglio (ground floor)
- Group 2: Aula dei Filosofi (ground floor)
- Group 3: Aula dei Cavalieri (ground floor)
- Group 4: Aula 1 (2nd floor)
- Group 5: Aula 2 (2nd floor)
- Group 6: Aula della Bandiera (2nd floor)

Registration Desk
The Organising Secretariat Desk will be located on the ground floor, in the room next to the main meeting room (Aula Magna). It will be open for registration and information according to the following schedule:

- Wednesday, August 29: 15.00 - 20.30
- Thursday, August 30: 07.30 - 17.00
- Friday, August 31: 07.30 - 14.00
- Saturday, September 1: 07.30 - 17.00

Please collect the meeting kit at the Secretariat Desk and wear your name badge during the scientific sessions and social activities.

Certificate of Attendance
The certificate of attendance is included in the congress kit.
GENERAL INFORMATION

Slide Preparation and Preview
You can preview your slides in the Aula Magna, the main meeting room. Speakers may use PowerPoint (for Windows or Macintosh) or Keynote (for Macintosh). If you are a PowerPoint user, your presentation will be transferred to a podium Windows computer. If you are a Keynote user, you are requested to present from your own computer. Please ensure you bring the appropriate cables for presentation. Speakers are advised to check their presentations beforehand to ensure that videos or special animations run correctly. Presentations must be handed to the AV technicians at least two hours before the start of the session.

Speakers’ Lounge: Sala Prorettori, next to the Aula Magna.

Catering
Coffee breaks and buffet lunches are included in the registration fee. All the delegates and registered accompanying persons are welcome to join the Social Events included in the registration fee (please see Social Events section for further information).

Dress code
The dress code will be informal for all sessions and social events.

Insurance
The organisers are not responsible for individual medical, travel or personal insurance. Registrants and accompanying persons should arrange their own coverage.

Contact Information
For assistance, please contact the Organising Secretariat:

OIC srl - Organizzazione Internazionale Congressi
Viale Giacomo Matteotti, 7 - 50121 Florence (Italy)
Tel. +39 055 50351 - grs2018@oic.it

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SOCIAL EVENTS

WEDNESDAY, AUGUST 29
Welcome Reception
18.30-20.30
University of Parma

GRS welcomes all registered delegates and accompanying persons to this wonderful evening, a great opportunity to mingle with the other meeting delegates while enjoying wonderful Italian food, drinks and entertainment.

THURSDAY, AUGUST 30
Parma City Tour including Dinner
18.00-23.00

Join us for a walking tour through the chief attractions of Parma: the splendid Romanesque Cathedral, frescoed by Correggio, and the octagonal Baptistery, a Benedetto Antelami’s architectural and sculptural masterpiece.
Groups up to 30 people will be formed upon arrival to enjoy the visit of the monuments, which will be exceptionally opened till 19.30 just for GRS members.
The walking tour ends up the Corale Verdi restaurant, where participants will taste typical flavors of local cuisine while being entertained by the soothing notes of most famous opera arias.

18.00  Meeting point in front of Caffetteria Toschi (Viale Toschi, 2 - 43121 Parma)
18.15  Transfer from the Park Hotel Pacchiosi to the meeting point
20.00  Dinner at Corale Verdi Restaurant (Vicolo Asdente, 9 - 43125 Parma)
SOCIAL EVENTS

FRIDAY, AUGUST 31

Half-day Tour PM: Arts in Parma, visit to the National Gallery and Farnese Theatre
15.30-17.00

The tour will provide the opportunity to visit the National Gallery, situated in the Palazzo della Pilotta. The collections currently include works from the 13th to the 19th centuries, by several schools and masters, and the famous painting “la Scarmigliata” by Leonardo Da Vinci. The Farnese Theater, one of the most beautiful historical theaters in Italy, was built between 1618 and 1619 and rebuilt after World War II.

15.15 Transfer from the Park Hotel Pacchiosi to the meeting point
15.30 Meeting point in front of Caffetteria Toschi (Viale Toschi, 2 - 43121 Parma)

Optional half-day Tour including Dinner: Torrechiara Castle, Parma countryside and the Benedictine abbey Santa Maria della Neve
17.00-22.30

After the full immersion art tour offered to all registered participants, the tour will continue for those who booked the additional optional afternoon and evening tour. Italo Comelli, a local expert and Professor of Art History at the Università Popolare di Parma, will guide participants to discover the unique treasures nested at the Santa Maria della Neve Abbey.

17.00 Meeting point in front of Caffetteria Toschi (Viale Toschi, 2 - 43121 Parma)

SATURDAY, SEPTEMBER 1

Visit to Antica Corte Pallavicina: Parmesan Cheese and Culatello Ham Factory & Farewell Dinner
18.00-23.30

This excursion for all registered delegates and accompanying persons is a full immersion in the heart of the Parma countryside and its gastronomic tradition. You will enjoy an unforgettable experience discovering old secrets and unique flavors at Corte Pallavicina, a traditional farmhouse and restaurant, where you will discover the Culatello ham, the most refined and noble cold cuts of Parma tradition. This tour will take you to discover its magic, its curing process, its unique flavor lent by the humidity of fog. During the visit to Corte Pallavicina, you will also discover how milk is processed and transformed to make Parmigiano Reggiano PDO, a unique blend of flavors and nutritional properties. After the tour, participants will have dinner at the Corte Pallavicina Restaurant, awarded with a Michelin Star in 2011, which represents Parma’s most refined and sophisticated cuisine, enhanced by the raw materials produced in the garden of the Old Pallavicina Court.

18.00 Meeting point in front of Park Hotel Pacchiosi (Str. Quartiere, 4 - 43125 Parma)