

**WEDNESDAY SEPTEMBER 28<sup>TH</sup> 2016**

8.00 Registration

8.45 Opening Session

**9.00 PERIMETRY I**

Chairs: David Crabb, Chota Matsumoto

**ARE BIG STIMULI "EASIER" TO SEE? AN ANALYSIS OF RESPONSE TIMES FROM FREQUENCY-OF-SEEING DATA**

Paul H. Artes, Matthias Monhart, Marco Miranda

**EFFECT OF LOCALIZED DEFOCUS ON MEASUREMENTS OF SPATIAL SUMMATION OF PERIMETRIC STIMULI**

Shindy Je, Julia M. Rose, James E. Morgan, Tony Redmond

**MISMATCH (MM). A NEW DISHARMONY INDEX FOR DIAGNOSIS IN THE GLAUCOMATOUS VISUAL FIELD**

Manuel Gonzalez de la Rosa, Rodrigo Abreu-Gonzalez, Paloma Rodriguez-Esteve, Cristina Pena-Betancor, Marta Gonzalez-Hernandez

**10.00 STRUCTURE I**

Chairs: David Garway-Heath, Chris A. Johnson

**SIGNIFICANCE OF STRUCTURAL CHANGES IN PAPILLARY AND PERIPAPILLARY NERVE FIBER LAYER FOR GLAUCOMA**

Fritz Dannheim, Harald Wohlgenuth

**TOPOGRAPHIC ESTIMATION OF HEMOGLOBIN IN THE OPTIC NERVE HEAD USING ONLY CONVENTIONAL PHOTOGRAPHIC IMAGES**

Marta Gonzalez-Hernandez, Francisco Fumero-Batista, José Sigut, Cristina Pena-Betancor, Silvia Alayon, Tinguaro Diaz Aleman, Manuel Gonzalez de la Rosa

**EXAMINING THE STRUCTURE-FUNCTION RELATIONSHIP IN GLAUCOMA WITH ACHROMATIC PERIMETRIC STIMULI EXHIBITING COMPLETE SPATIOTEMPORAL SUMMATION**

Pádraig J. Mulholland, Tony Redmond, David F. Garway-Heath, Roger S. Anderson

**ADJUSTING CIRCUMPAPILLARY RETINAL NERVE FIBER LAYER THICKNESS PROFILE MEASURED WITH OPTICAL COHERENCE TOMOGRAPHY USING THE RETINAL ARTERY POSITION IMPROVES THE STRUCTURE-FUNCTION RELATIONSHIP**

Yuri Fujino, Takehiro Yamashita, Meiko Yanagisawa, Hiroshi Murata, Ryo Asaoka

**AUTOMATICALLY IDENTIFYING THE TEMPORAL RAPHE FROM OCT MACULAR CUBE DATA**

Allison M. McKendrick, Philip A. Bedgood, Fumi Tanabe, Andrew Turpin

**CONVENTIONAL AND COMPUTATIONAL (PATTERN RECOGNITION) DERIVED LOSS OF RETINAL GANGLION CELLS DURING AGING**

Yoshioka Nayuta, Sieu Khuu, Barbara Zangerl, Lisa Nivison-Smith, Robert Marc, Bryan Jones, Rebecca Pfeiffer, Michael Kalloniatis

11.30 *Coffee break***12.00 PERIMETRY II**

Chairs: Michael Wall, Joerge Weber

**PATTERN RECOGNITION APPLIED TO STATIC PERIMETRY REVEALS UNIQUE CONTRAST SENSITIVITY ISOCONTOURS ACROSS THE VISUAL FIELD**

Michael Kalloniatis, Robert Marc, Sieu Khuu, Jack Phu, Agnes Choi, Barbara Zangerl, Lisa Nivison-Smith, Bryan Jones, Rebecca Pfeiffer

**ANALYSES OF GAZE POINTS DURING SIMULATED DRIVING IN NORMAL AND GLAUCOMA SUBJECTS**

Aiko Iwase, Yuto Susuki, Yuko Ohno, Shiho Kunimatsu-Sanuki, Chota Matsumoto, Makoto Araie

**PHYSIOLOGIC STATOKINETIC DISSOCIATION IS ELIMINATED BY EQUATING THE PSYCHOPHYSICAL PROCEDURES OF STATIC AND KINETIC PERIMETRY**

Jack Phu, Noha Al Saleem, Michael Kalloniatis, Sieu Khuu

**CAN FUNCTIONAL AND STRUCTURAL OUTCOMES PREDICT VISION-RELATED QUALITY OF LIFE IN AGE-RELATED MACULAR DEGENERATION?**

Nicola Cassels, John Wild, Tom Margrain, Victor Chong, Jennifer Acton

**13.00 LUNCHEON PRESENTATION**

**FUNDUS AUTOMATED PERIMETRY: LATES INNOVATION IN VISUAL FIELD**

Sponsored by Centervue

Giuliano Barbaro

13.30 *Lunch*

**14.30 PROGRESSION ANALYSIS I**

Chairs: Fritz Dannheim, Manuel Gonzalez de la Rosa

**STRUCTURAL CHANGE CAN BE DETECTED IN ADVANCED GLAUCOMA EYES**

Linda Zangwill, Felipe A. Medeiros, Christopher Bowd, Jeffrey M. Liebmann, Christopher A. Girkin, Robert N. Weinreb, Luke Saunders, Akram Belghith

**PERCENTILE PLOT - A NEW GRAPHICAL ANALYSIS OF THE QUANTITATIVE ASPECTS OF PROGRESSION**

Joerg Weber

**SIGNIFICANT GLAUCOMATOUS VISUAL FIELD PROGRESSION IN THE FIRST TWO YEARS: WHAT DOES IT MEAN?**

Andrew J. Anderson

**THE USEFUL DYNAMIC RANGE OF STANDARD AUTOMATED PERIMETRY FOR PROGRESSION IN GLAUCOMA: SIZE III VS. SIZE V**

Gideon Zamba, Paul H. Artes, Michael Wall

**CLUSTER TREND ANALYSIS FOR DETECTION OF VISUAL FIELD CHANGE**

Stuart K. Gardiner, Shaban Demirel

15.45 *Coffee break*

**16.15 POSTER SESSION A**

Chairs: Paul H. Artes, Aiko Iwase, Mario Zulauf

**1. FIXATIONAL EYE MOVEMENTS MEASURED BY EYE TRACKING SYSTEM EMR-9 IN THE STATIC VISUAL FIELD TESTING**

Ikumi Umehara, Akemi Wakayama, Yuma Nakai, Takeshi Kohama, Chota Matsumoto, Yoshikazu Shimomura

**2. DEVELOPMENT OF A ROBOT ("LORIS") FOR VISUAL FIELD TESTING USING A HIGH DYNAMIC RANGE (HDR) CAMERA**

Shigeki Hashimoto, Chota Matsumoto, Sachiko Okuyama, Hiroki Nomoto, Tomoyasu Kayazawa, Takuya Numata, Yoshikazu Shimomura

**3. VISUAL FIELD PARADIGMS FOR ASSESSING FUNCTIONAL FIELD LOSS**

Subhi Hikmat, Keziah Latham, Joy Myint, Michael Crossland

**4. RELATIONSHIP BETWEEN RETINAL ARTERY TRAJECTORY AND OCULAR BIOMETRY IN JAPANESE ELEMENTARY AND JUNIOR HIGH SCHOOL STUDENTS**

Takehiro Yamashita, Naoya Yoshihara, Taiji Sakamoto

**5. THE RELATIONSHIP BETWEEN THE TARGET ENERGY AND REACTION TIME AT THE LOCATION OF KINETIC THRESHOLD**

Tomoyasu Kayazawa, Chota Matsumoto, Sachiko Okuyama, Shigeki Hashimoto, Hiroki Nomoto, Takuya Numata, Yoshikazu Shimomura

**6. AN INVESTIGATION OF THE ROBUSTNESS OF PREDICTION ACCURACY OF A DYNAMIC STRUCTURE-FUNCTION MODEL FOR GLAUCOMA PROGRESSION**

Fang-I Chu, Iván Marín-Franch, Lyne Racette

**7. THE EFFECT OF CONCENTRIC CONSTRICTION OF THE VISUAL FIELD OF 10 AND 15 DEGREES ON AUTOMOBILE DRIVING**

**Sachiko Udagawa**, Aiko Iwase, Shinji Ohkubo, Yuto Susuki, Shiho Kunimatsu-Sanuki, Hiroshi Ono, Takeo Fukuchi, Chota Matsumoto, Sugiyama Kazuhisa, Makoto Araie

**8. AUTOMATED GLAUCOMA CLASSIFICATION IN VISUAL FIELDS**

**Serife Seda Kucur**, Raphael Sznitman

17.15 Session Finish

## THURSDAY SEPTEMBER 29<sup>TH</sup> 2016

8.00 Registration

### 8.45 NEW INSTRUMENTS AND TECHNIQUES I

Chairs: Allison M. McKendrick, Kazuhisa Sugiyama

#### PROPERTIES OF NORMATIVE DATA FOR THREE MULTIFOCAL PUPILLOGRAPHIC OBJECTIVE PERIMETRY (MFPOP) TESTS

Corinne F. Carle, Özge Saraç, Rohan W. Essex, Maria Kolic, Emilie M.F. Rohan, Faran Sabeti, Andrew C. James, Ted Maddess

#### NEW PERIMETER WITH VIDEO IMAGING TECHNOLOGY - CLINICAL APPLICATIONS

Jacques Charlier, Xavier Zanlonghi

#### RESPONSE VARIABILITY FOR MULTI-DIMENSIONAL PERIMETRIC STIMULI IN GLAUCOMA

Lindsay Rountree, Pádraig J. Mulholland, Roger S. Anderson, Tony Redmond

#### VISUAL FIELD TESTING WITH NEW HEAD-MOUNTED PERIMETER "IMO"

Chota Matsumoto, Sayaka Yamao, Hiroki Nomoto, Sachiko Okuyama, Shinji Kimura, Kenzo Yamanaka, Makoto Aihara, Yoshikazu Shimomura

### 9.45 PROGRESSION ANALYSIS II

Chairs: David Crabb, Linda Zangwill

#### COMPARISON OF GLAUCOMA PROGRESSION DETECTION USING 24-2 AND 10-2 VISUAL FIELDS

Luke J. Saunders, Akram Belghith, Felipe A. Medeiros, Robert N. Weinreb, Linda M. Zangwill

#### THE USEFULNESS OF CORVISST TONOMETRY AND THE OCULAR RESPONSE ANALYZER TO ASSESS THE PROGRESSION OF GLAUCOMA

Masato Matsuura, Kazunori Hirasawa, Hiroshi Murata, Shunsuke Nakakura, Yoshiaki Kiuchi, Ryo Asaoka

#### VISUAL FIELD ANALYSIS TOOLS FOR REAL WORLD CLINICS

Susan Bryan, David Crabb

#### THE SYDNEY OPHTHALMIC GLAUCOMA STUDY (SOGS)

Barbara Zangerl, Michael Yapp, Michael Hennessy, Minas Coroneo, Andrew Hayen, Paul Healey, Paul Mitchell, Michael Kalloniatis

10.45 *Coffee break*

### 11.15 POSTER SESSION B

Chairs: Stefano Gandolfi, Stuart Gardiner, Allison M. McKendrick

#### 9. DEVELOPMENT OF A TRAINING SYSTEM FOR THE MEASUREMENT OF MANUAL KINETIC PERIMETRY USING THE GOLDMANN PERIMETER

Hokuto Ubukata, Fumiatsu Maeda, Osamu Masuda, Maki Shindo, Ryosuke Kawachi, Akiko Kobayashi, Kazutaka Kani, Haruki Abe

#### 10. STATISTICS OF JOINT STRUCTURAL AND FUNCTIONAL CHANGES IN EYES WITH GLAUCOMA AFTER SHORT SERIES OF VISITS

Ivan Marin-Franch, Fang-I Chu, Lyne Racette

#### 11. COMPARING MULTIFOCAL PUPILLOGRAPHIC OBJECTIVE PERIMETRY (MFPOP) AND MULTIFOCAL VISUAL EVOKED POTENTIALS (MFVEP) IN RETINAL DISEASES

Corinne F. Carle, Ted Maddess, Andrew C. James, Rohan W. Essex, Andrew Bell, Faran Sabeti

#### 12. MONITORING QUALITY AND VIGILANCE DURING AUTOMATED STATIC PERIMETRY. A PROOF-OF-CONCEPT-STUDY USING VIDEO-PUPILLOGRAPHY, HEART RATE RECORDING, AND AN INCREASED NUMBER OF CATCH TRIALS

Judith Ungewiss, Thomas Kübler, Hanspeter A. Mallot, Ulrich Schiefer

#### 13. MONOCULAR SENSITIVITY MEASURED WITH BOTH EYES OPEN USING THE HEAD-MOUNTED PERIMETER IMO®

Akemi Wakayama, Chota Matsumoto, Yoriko Ayato, Yoshikazu Shimomura

**14. VISUAL FIELD TESTING USING A PORTABLE TABLET DEVICE**

**Yu Xiang George Kong** , Ming Guang He, Jonathan G. Crowston, Algis J. Vingrys

**15. UTILITY OF STRUCTURAL AND FUNCTIONAL MEASUREMENTS IN DETECTING EARLY GLAUCOMA**

**Kazunori Hirasawa**, Natsumi Takahashi, Kazuhiro Matsumura, Masayuki Kasahara, Nobuyuki Shoji

12.15 **THE AULHORN LECTURE**

Chair: David Garway-Heath

**WHAT HAPPENS IN THE BACK OF THE EYE WHEN IOP DROPS?**

**Stefano Gandolfi**

13.00 Session Finish

**FRIDAY SEPTEMBER 30<sup>TH</sup> 2016**

8.00 Registration

**8.15 BREAKFAST PRESENTATION**

**BRIDGING THE GAP BETWEEN SAP AND SUPRA-THRESHOLD TESTING: A NEW SUPRA-THRESHOLD ALGORITHM**

Sponsored by Elektron Technology  
David Henson

**8.45 NEW INSTRUMENTS AND TECHNIQUES II**

Chairs: Nomdo M. Jansonius, Luca Rossetti

**TABLET VISUAL FIELD SCREENING: COMPARISON OF TESTS AND EXAM CONDITIONS**

Chris A. Johnson, Swati Upadhyaya, Suman Thapa, Alan Robin, Jenny Reiniger, Johanne Forkel

**NOVEL PERIMETRY USING EYE TRACKING ON A TABLET COMPUTER - A FEASIBILITY STUDY**

David Crabb, Wei Bi, Nicholas Smith

**THE FACTORS OF VISUAL FIELD SENSITIVITY FLUCTUATION ON HIGH RESOLUTION PERIMETRY WITH 0.5-DEGREE INTERVAL**

Takuya Numata, Chota Matsumoto, Sachiko Okuyama, Fumi Tanabe, Shigeki Hashimoto, Tomoyasu Kayazawa, Ted Maddess, Yoshikazu Shimomura

**PERFORMANCE EVALUATION OF A NOVEL COMPUTER-BASED SELF-ADMINISTERED VISUAL FIELD SCREENING TEST FOR GLAUCOMA**

Emmanouil Tsamis, Cecilia Fenerty, Robert Harper, Tariq Aslam, David Henson

**COMPARISON OF THE MACULAR MAPPING TEST (MMT) WITH NEAR VISUAL ACUITY, M-CHARTS AND THE AMSLER-GRID IN MACULAR DISEASES**

Sabrina Marchesi, Mario Zulauf, Manfred MacKeben, Werner Eisenbarth

**10.00 POSTER SESSION C**

Chairs: Paolo Capris, Mitchell Dul, Ulrich Schiefer

**16. COMPARISON OF THE NEW COMPASS PERIMETER WITH HUMPHREY FIELD ANALYZER USING THE GLAUCOMA STAGING SYSTEM 2 (GSS 2)**

Paolo Fogagnolo, Giovanni Montesano, Maurizio Digiuni, Luca Rossetti, Paolo Brusini

**17. COMPARISON OF RADIAL PERIPAPILLARY CAPILLARIES BETWEEN TWO OCT-A SCANNING AREAS**

Kimikazu Sakaguchi, Tomomi Higashide, Sachiko Udagawa, Shinji Ohkubo, Kazuhisa Sugiyama

**18. THE OCT STAGING SYSTEM: A NEW METHOD FOR A STANDARDIZED CLASSIFICATION OF THE GLAUCOMATOUS RETINAL NERVE FIBER LAYER LOSS ASSESSED WITH OCT**

Paolo Brusini, Marco Zeppieri, Claudia Tosoni, Maria Letizia Salvetat

**19. EVALUATION OF THE AMBIENT INTERACTIVE ZEST (AIZE) OF A HEAD MOUNTED PERIMETER "IMO" IN NORMAL SUBJECTS**

Hiroki Nomoto, Chota Matsumoto, Sachiko Okuyama, Asami Minamino, Tairou Kimura, Keiji Yoshikawa, Shirou Mizoue, Aiko Iwase, Hajime Aihara, Shigeki Hashimoto, Takuya Numata, Sayaka Yamao, Shinji Kimura, Yoshikazu Shimomura

**20. INVESTIGATING THE USEFULNESS OF CLUSTER TREND ANALYSIS**

Shuichiro Aoki, Hiroshi Murata, Ryo Asaoka

**21. PRECISION OF COMPASS PERIMETER: SHORT TERM REPEATABILITY**

Luca Rossetti, Paolo Fogagnolo, Giovanni Montesano, Maurizio Digiuni, Paolo Brusini

11.00 *Coffee break*

**11.30 PERIMETRY III**

Chairs: Andrew Anderson, Hiroshi Murata

**TESTING OF THE FULL VISUAL FIELD IN EARLY GLAUCOMA: THE IOWA OPEN PERIMETRY INITIATIVE**

Michael Wall, Paul H. Artes, Luke X. Chong, Eric Lee, Rob Wanzek, Ivan Marin-Franch, Bill Swanson, Chris A. Johnson, Allison M. McKendrick, Andrew Turpin

**PROPERTIES OF MICROPERIMETRIC DEFECTS AT THE MONOCULAR PREFERRED RETINAL LOCUS IN AMD DERIVED USING A NEW SPATIAL INTERPOLATION TECHNIQUE**

Jonathan Denniss, Helen C. Baggaley, Andrew T. Astle

**THE INFLUENCE OF PERIMETRIC STIMULUS SIZE ON DEFECT DETECTABILITY IN EARLY GLAUCOMA**

Matthias Monhart, John G. Flanagan, Luke X. Chong, Paul H. Artes, Michael Wall, Tom Callan, Vincent M. Patella, Gary Lee

**MULTIVARIABLE LOGISTIC REGRESSION OF ASYMMETRY INDICES FOR DETECTING EARLY POAG**

David Henson, Naqibah Ghazali

12.30 **INVITED SPEAKER**

Chair: Paolo Brusini

**A POLYMERIC NEUROINTERFACE RESTORES LIGHT SENSITIVITY IN DEGENERATE RETINAS: POTENTIAL APPLICATION AS ARTIFICIAL RETINA**

Fabio Benfenati

13.15 *Lunch*14.45 **PERIMETRY IV**

Chairs: Ryo Asaoka, David Henson

**VALIDATING VARIATIONAL BAYES LINEAR REGRESSION MODEL WITH MULTICENTRAL DATA**

Hiroshi Murata, Yuri Fujino, Ryo Asaoka

**INCORPORATING PROBABILISTIC GRAPHICAL MODELS INTO PERIMETRIC TEST PROCEDURES**

Nikki J. Rubinstein, Allison M. McKendrick, Andrew Turpin

**SEQUENCE EFFECTS DURING FREQUENCY-OF-SEEING EXPERIMENTS IN PERIMETRY**

Marco Miranda, Paul H. Artes

**DE VRIES-ROSE AND WEBER LAW IN GLAUCOMA**

Nomdo M. Jansonius, Marije H. de Boer, Ronald A.J.M. Bierings

15.45 **IPS LECTURE**

Chair: Chris A. Johnson

**THE VISUAL FIELD-MORE THAN JUST PERIMETRY**

Ulrich Schiefer

16.30 **IPS GENERAL BUSINESS MEETING**

17.15 Session Finish