Organizing Committee: Bruno Lumbroso, Francesco Bandello, David Huang, David Sarraf, Quan Dong Nguyen, Alain Gaudric, Eric Souied, Giuseppe Querques, Marco Rispoli
Italian committee: Francesco Bandello, Leonardo Mastropasqua, Giuseppe Querques, Marco Rispoli, Stanislao Rizzo, Giovanni Staurenghi
President: James Fujimoto

Friday

Plenary Hall Sessions

7.45 – 8.23 - Macular Degeneration, CNV 1
Session David Sarraf - Neovascular AMD: Long Term Outcomes with OCT and OCTA
Srinivas Sadda - Long Term Outcomes of Neovascular AMD: Which Lesion Morphology is Best?
David Sarraf - Multilayered PED: Is This the Best Anatomical Outcome of Neovascular AMD?
K. Bailey Freund - Recapitulation of the Choriocapillaris: Can Type 1 Macular NV Provide Nutritional Support to the Outer Retina?
Discussion (10')

8.23 – 8.43 – Bruno Lumbroso Lecture

8.43 – 8.58 - Keynote Lecture
Eric Souied - Pathways from CNV to fibrosis

8.58 – 9.50 - Strategies for Analyzing Choriocapillaris and Choroidal Flow Impairment
Chairs: David Sarraf, Srinivas Sadda, Philip J. Rosenfeld
Richard Spaide - What is the best way to image choriocapillaris flow with optical coherence tomography angiography? Techniques and pitfalls.”
Ruikang Wang - Processing tips and strategies for quantifying choriocapillaris flow deficits
Nadia Waheed - Common pitfalls when imaging the choriocapillaris
Enrico Borrelli - Variables used to characterize choroidal perfusion: what is their relationship?
Srinivas Sadda - Slab selection for visualizing the “choriocapillaris”: could deeper be better?
Philip J. Rosenfeld - How do we define an abnormal choroid?
Discussion (10')

9.50 – 10.49 - Choriocapillaris Flow Deficits in Macular Diseases
Chairs: David Sarraf, Srinivas Sadda, Philip J. Rosenfeld
Srinivas Sadda - Are choriocapillaris flow deficits associated with drusen formation?
Philip J. Rosenfeld - Are choriocapillaris flow deficits associated with the formation and growth of GA (cRORA)
David Sarraf - Are choriocapillaris flow deficits associated with the growth and exudation of MNV
Alexandra Miere, Eric Souied – Are long-term quantitative choriocapillaris flow impairments associated with AMD?
Nadia Waheed - Are macular choriocapillaris flow deficits associated with the severity of diabetic retinopathy?
Richard Rosen - Nonperfusion and Reperfusion revealed in serial Using Reference-Based OCT Angiography Perfusion Density Mapping
Francesco Pichi - Are choriocapillaris flow deficits associated with inflammatory conditions
Discussion (10’)

10.49 – 11.04 - Keynote Lecture
Richard Spaide - New ideas in imaging the choriocapillaris

11.04 – 12.14 - Visions of Future by Industry Senior Executives
Chairs: James Fujimoto, Wolfgang Drexler, Bruno Lumbroso
Optovue - Jay Wei
Zeiss
Nidek
Topcon
Heidelberg Engineering -
Optopol - Arkadiusz Chalecki - Newest OCT developments
Mocean
Novartis - Gaia Panina - Commitments and pipeline
Centervue
Canon - Ori Zahavi: The future with Canon

12.14 – 12.59 - SYMPOSIUM: Satellite Education Program Optovue

13.00 – 13.45 - Hall A: lunch symposium ZEISS
(Lunch boxes available for the first 250 attendees)

13.00 – 13.45 - Hall B: lunch symposium NIDEK
(Lunch boxes available for the first 250 attendees)

Friday AFTERNOON
Hall A

14.00 – 14.15 - Keynote Lecture
Ruikang Wang - How do we know we’re actually imaging choriocapillaris flow deficits?

14.15 – 14.30 – Keynote Lecture
Philip J. Rosenfeld - Changes in the Choroid and Choriocapillaris associated with Aging and Macular Diseases

14.30 – 15.03 - OCTA: research or routine?
Chairs: Yves Salomon Cohen, Quan Dong Nguyen
Adil El Mafthoui - OCTA vs. RNFL and Visual field in Glaucoma
Aniruddha Agarwal, Quan-Dong Nguyen - OCTA vs. Fluorescein and ICG angiography in inflammatory conditions
Gemmy Cheung - OCTA vs. Multimodal Imaging in Complications of Pathologic Myopia
Salomon Y Cohen - OCTA vs. fluorescein angiography for diagnosis and follow-up of CNV in AMD
Discussion (5’)

15.03 – 15.55 - The Expanded Spectrum of treatment naïve non exudative Macular Neovascularization
Chairs: Giuseppe Querques, Philip J Rosenfeld, Nadia K Waheed
Giuseppe Querques - The Spectrum of Treatment-Naive Subclinical Macular Neovascularization
Philip J. Rosenfeld - Natural History of Subclinical non exudative Neovascularization in AMD
Nadia K. Waheed - Vascularized drusen in AMD
Vittorio Capuano - Quiescent Macular Neovascularization in Geographic Atrophy
Riccardo Sacconi - Quantitative analysis of Quiescent neovascularization using OCT-A
Enrico Borrelli - Quiescent Macular Neovascularization in Pachychoroid disease
Discussion (10’)

15.55 – 17.01 - Macular degeneration, CNV Treatment
Chairs: Francesco Bandello, Francesco Boscia
Francesco Viola - OCT/angio OCT
Friday AFTERNOON
Hall B

14.00 – 14.45 - Histological Validation of OCT and OCTA Signatures
Chairs: Christine A. Curcio, K. Bailey Freund
Chandra Balaratnasingam - OCTA-histology correlation of the macular circulation
Christine A. Curcio - Imaging-histology correlations in non-neovascular AMD
Serena Fragiotta - Hyperreflective crystalline deposits in non-neovascular AMD
K. Bailey Freund - Clinical relevance of non-exudative type 1 neovascularization
Ling Chen - Clinicopathologic correlation of non-exudative type 1 neovascularization
Discussion (10’)

14.45 – 15.00 - Keynote Lectures
K. Bailey Freund - Current understanding of Pachychoroid disease

15.00 – 15.45 - The Pachychoroid Disease Spectrum 1
Chairs: K. Bailey Freund, Won Ki Lee
Won Ki Lee - Retinoschisis in eyes with pachychoroid
Gemmy Cheung - Choroidal morphology in pachychoroid disease
Jay Chhablani - Consensus nomenclature for CSCR
K. Bailey Freund - 3D rendering of aneurysmal pachychoroid neovascularopathy
Hideki Koizumi - Ocular biometry in CSC
Discussion (10’)

15.45 – 16.11 - The Pachychoroid Disease Spectrum 2
Chair: K. Bailey Freund
Mark Nelson - Exudative Maculopathies – Polymorphic Spectrum of Pachychoroid, Central Serous Chorioretinopathy, and Choroidal Neovascularization (CNV) – Classification, Diagnosis and Treatment
Claire Scemama-Timsit, Vivien Vasseur, Benjamin Wolff, Élise Boulanger-Scemama, Martine Mauget-Faÿsse - Type 2 Neovascularization and Pachychoroid Pigment epitheliopathy: a new Association

Marco Lupidi, Daniela Fruttini, Chiara Maria Eandi, Massimo Nicolò, Diogo Cabral, Silvia Tito, Carlo Cagini, Felice Cardillo Piccolino - Chronic Neovascular Central Serous Chorioretinopathy: A Stress/Rest Optical Coherence Tomography Angiography Study

Discussion (5')

16.11 – 16.51 - CSC

Chair: Ethan Priel, Thomas Theelen, Tok-Han Lim

Thomas Theelen, Hélène Baak, Caroline W. Klaer, Carel B. Hoyng - Accuracy of optical coherence tomography angiography in detecting subretinal neovascularization associated with central serous chorioretinopathy

Tock Han Lim - Multimodal Imaging Correlation for CSCR/Pachychoroid Spectrum

Orly Gal-Or - Choroidal neovascularization complicating Central Serous Chorioretinopathy evaluated by OCT Angiography

Ethan Priel - OCT in CSCR – New and Multi-Modal Imaging Findings

Giovanni Staurenghi – Color AF Findings in CSCR

Discussion (5')

16.51 – 17.29 - Study of the choroid by OCT and OCT-A

Chair: Jose Maria Ruiz Moreno

Rufino Silva - The choroid in a Caucasian Population with PCV

Luis Arias - Choroid in RAP

Iñaki Flores - The choroid in pachychoroidal epitheliopathy, central serous chorioretinopathy and pachychoroidal neovascularopathy

Jay Chhablani - Study of the choroid by OCT: Choroidal Biomarkers

Discussion (10')

17.29 – 19.03 - OCT in inherited retinal dystrophies

Chairs: Martine Mauget Faÿsse, Isabelle Meunier - VENERDì' pomeriggio

Xavier Zanlonghi, B. Bocquet B, Isabelle Meunier, M. Charif, G. Lenears, C. Delettre - SSBP1 Gene: Multimodal Imaging of Optic Nerve Diseases and Fovea

Sabine Derrien, E. Laumonier, R. Lejoyeux, M. Robert, Vivienne Vasseur, AS Alonso, Martine Mauget-Faÿsse - Macular Genesis in Albinism


Isabelle Meunier - When OCT is not sufficient for retinal dystrophy diagnosis

Marco Nassisi, C. Lavia, S. Mohand-Saïd, M. Chapon, S. Sancho, C. Zetz, JA Sahel, I. Audo - OCTA findings correlated with other multimodal imaging techniques in rod-cone dystrophies

Sabine Defoort - Dhellemmes. Portable OCT in children with retinal dystrophies

Bart P. Leroy - Mild phenotype of retinal dystrophies identified by imaging

Ismael Chehaibou, R. Orès, S. Mohand-Saïd, JA Sahel, I. Audo I - Carbonic anhydrase inhibitors for the management of cystic macular lesions in X-linked retinoschisis

Elsa Laumonier, Elisa Boulanger, Vivienne Vasseur, AS Alonso, Sabine Derrien, Martine Mauget-Faÿsse, Claire Scemama - Clinical cases of interest


Benedetto Falsini - Tecniche avanzate di elettroretinografia nelle degenerazioni ereditarie retiniche

Discussion (10')

Friday AFTERNOON

Hall C
14.00 – 14.59 - Diabetic Retinopathy 1

Chairs: Edoardo Midena, Amir Kashani

Edoardo Midena - Müller cells in diabetes: imaging and liquid biopsy
Amir Kashani - Retinal Vascular Reactivity in Diabetic Retinopathy
Luisa Friziero - The fourth retinal capillary plexus in diabetes
Ana Rita Santos - Two-year progression of diabetic retinopathy. A multimodal imaging approach
Zhao Yue, Yao Mudi, Tang ShuiJing, Shen Yi, Xu XiangZhong, Yan ZhiPeng, Yao Jin, Jiang Qin - Evaluation of Optical Coherence Tomography Angiography Macular Quantitative Indicators as Prediction of Diabetic Retinopathy Stages
Ana Rita Santos - Different disease pathway in the initial stages of diabetic retinopathy, identified by multimodal imaging

Discussion (10')

14.59 – 15.58 - Diabetic Retinopathy 2

Classifying Diabetic Retinopathy Severity: Time to go Beyond the ETDRS system

Chair: Amani Fawzi

Lee Jampol - ETDRS: Historical Perspective
Lee Jampol - ETDRS: Current Weaknesses
Nadia Waheed - Wide angle OCTA as a potential tool for improving DR classification
Alain Gaudric - Deep Dive: depth-resolved, wide-angle capillary density in healthy and diabetic eyes
Amani Fawzi - Can we predict DR progression?
Ramin Tadayoni - Intelligent evaluation of diabetic retinopathy
Richard Rosen - OCT Angiography Capillary Perfusion Densities versus the Early Treatment Diabetic Retinopathy Study Grading Scale

Discussion (10')

15.58 – 16.50 - Diabetic Retinopathy 3

Chairs: Sebastian Wolf, Khalil Falavarjani, Miho Nozaki, Sandrine Zweifel, Anna Wozniak

Sebastian Wolf - OCT-A in the diagnosis of early vascular changes in diabetic retinopathy
Khalil Falavarjani - Effect of segmentation error correction on optical coherence tomography angiography measurements in healthy subjects and diabetic macular oedema
Dana Cernohuba - Vessel density and FAZ evaluation in diabetic retinopathy at OCT A
Anna Wozniak - Macular OCT-angiography parameters in prediabetes
Maltsev DS, Kulikov AN, Burnasheva MA, Kazak AA, Chhablani J. - Structural en face optical coherence tomography imaging for identification of leaky microaneurysms in diabetic macular edema
Miho Nozaki, Aoi Kominami, Munenori Yoshida, Yuichiro Ogura - Diabetic macular edema and microaneurysms in deep capillary plexus

Discussion (10')

16.50 – 17.37 - Diabetic Retinopathy 4 treatment

Chairs: Edoardo Midena, Khalil Falavarjani, Angelo Minnella,

Khalil Falavarjani - Changes in macular non-perfusion after anti-VEGF therapy in DME
Edoardo Midena - Factors affecting functional or anatomic outcomes when treating DME
Silvia Bini - New targets for micropulse laser in diabetic macular edema
Angelo Minnella - Valutazione morfo-funzionale in pazienti con EMD trattati con fluocinolone acetonide
Haensli Christof, Fasler Katrin, Zweifel Sandrine A. - Changes of individual Diabetic Retinal Neovascularizations under Treatment with intravitreal Anti-VEGF or Laser using Optical Coherence Tomography Angiography
Martín Flores-Aguilar, Selma Alín Somilleda-Ventura, Dulce Milagros Razo Blanco-Hernández, Virgilio Lima-Gómez - High correlation between total macular thickness and ganglion cell layer thickness in subjects without diabetes and subjects with diabetes without retinopathy

Discussion (5')

17.37 – 18.24 - Vascular Disorders, blood flow

Chairs: Dmitrii Maltsev, Jay Chhablani, Sandrine Zweifel, Florence Coscas
Dmitrii Maltsev, AN Kulikov, MA Burnasheva, Jay Chhablani - Resolved paracentral acute middle maculopathy lesions in fellow eyes of patients with unilateral retinal vein occlusion
Claudia Acosta, Miguel Gloria, Alejandro Lavaque, Vania Garcia, Evelin Torres, Carlos Miguel, Ángel Rios, Magali Buendía, Juan Manuel, Jiménez Rodrigo Lechuga, Carolina Sardi Juan Gonzalo Sanchez, Carlos Aníbal Restrepo - Relationship between geographic altitude, foveal avascular zone metrics and vascular density values assessed by optical coherence tomography angiography
Wiest Maximilian, Zollinger Lukas, Zweifel Sandrine A. - Changes in Retinal Blood Flow in Study Subjects during Valsalva Maneuver
Maryam Ashraf Khorasani, Abbas Habibi, Pasha Anvari, Sharyar Ghasemizadeh, Khalil Ghasemi Falavarjani - Retinal and optic disc micro vascular changes after acute intraocular pressure elevation in healthy and diabetic patients measured by optical coherence tomography angiography
Nadini Arumuganathan, Irene Beck, Katrin Fasler, Sandrine Anne Zweifel - Acute and subacute changes in retinal and choroidal blood flow following intravitreal anti-vegf injections
Diogo Cabral, Florence Coscas, Agnes Glacet-Bernard, Telmo Pereira, Carlos Geraldes, Ana Papoila, Gabriel Coscas, Eric Souied - Biomarkers of peripheral nonperfusion in retinal venous occlusions using Optical Coherence Tomography Angiography

Friday AFTERNOON
Hall D

14.00 – 14.47 - Ocular Inflammation, Uveitis
Chairs: Moncef Khairallah, Sandrine Zweifel
Xiaoxin Li, Xuan Shi, Yi Cai, Xiangdong Luo, Shuting Liang, Philip Rosenfeld - Hyper-transmission in SD-OCT as a sign to distinguish inflammatory from neovascular lesions in myopic eyes
Moncef Khairallah, Imen Ksiaa, Hager Ben Amor, Sana Khochtali, Riadh Messaoud - Combined swept-source OCT and OCT angiography in the appraisal and management of Behçet retinal vasculitis
Sandrine A. Zweifel, J. Baur, M. Al-Sheikh, K. Fasler - Optical Coherence Tomography Angiography findings in patients with systemic lupus erythematosus
Meng Tian, Christoph Tappeiner, Martin S. Zinkernagel, Sebastian Wolf, Marion R. Munk - Evaluation of vascular changes in posterior uveitis using swept source wide-field optical coherence tomography angiography
Moncef Khairallah, Sourour Zina, Molka Khairallah, Nesrine Abroug, Anis Mahmoud - Combined swept-source OCT and OCT angiography in the appraisal and management of placoid chorioretinopathies
Joel Hanhart, Hanan Nussinovitch, Boaz Shaer Itay Magal, Philip J Hashkes, David Zadok - OCT-angiography detection of a peripapillary CNV not captured by fluorescein angiography in sarcoidosis with severe vitritis
Discussion (5’)

Chair: Albert Augustin
Albert J. Augustin - Multi-modal Imaging and OCT Angiography: what role in the diagnosis of White-Dot Syndromes?
Emiliano Di Carlo - The role of OCT Angiography in the diagnosis and management of White-Dot Syndromes complicated by choroidal neovascularization
Ester Carreno - Multifocal choroiditis with Panuveitis, Serpiginous and Serpiginous-like choroiditis: an OCT Angiography-based approach
Tito Fiore - Multi-modal Imaging and OCT Angiography evaluation of Relentless placoid chorioretinitis
Francesco Pichi - Diagnosis and management of systemic-related choroiditis with the aim of OCT Angiography and Multi-modal Imaging
Michel Puech - OCT-A and pigmented lesions: choroidal vascularization analysis
**Discussion (10')**

**15.39 – 16.31 - Imaging Outcomes and Endpoints in Retinal Vascular Disease and Uveitis**

*Chairs: Diana V. Do, Itay Chowers, Quan Dong Nguyen*

- **Yasir J. Sepah** - Comparison of Foveal Avascular Zone Measurement using Optical Coherence Tomography Angiography and Fluorescein Angiography
- **Ruwan Silva** - OCT and Adaptive Optics in Solar Maculopathy
- **HoangMai Le** - Idiopathic Foveal Hypoplasia: Quantitative Analysis Using Optical Coherence Tomography Angiography
- **Carolyn K. Pan** - OCT in Obstructive Sleep Apnea and Central Serous Chorioretinopathy
- **Diana V. Do** - OCT Outcomes in Eyes Treated with KSI-301
- **Itay Chowers** - OCT Assessment of the Correlation of Response to Treatment with anti-VEGF Compounds Between Fellow Eyes in Diabetic Macular Edema

**Discussion (10')**

**16.31 – 17.04 - OCT and Surgery 1**

- **Jakub J. Kaluzny, Przemyslaw Zabel, Martyna Kaluzna, Aleksander Lamkowski, Damian Jaworski** - Correlation between microperimetry and en face OCT in eyes after pars plana vitrectomy for full thickness macular hole
- **Omar Trabelsi** - Macular changes in OCT-A after vitrectomy for retinal detachment
- **Scupola, A. Greco, G. Volpe, L. Ruggeri, M.A. Blasi** - Assessment of the deformation and thickness changes of neuroepithelial layer in the Epiretinal membrane using spectral-domain optical coherence tomography

**Discussion (5')**

**17.04 – 17.19 - Keynote Lecture**

*Barbara Parolini* - A new way to look at myopic traction maculopathy

**17.19 – 17.57 - Pathologic Myopia and Myopic Maculopathy. Multimodal study**

*Chair: Jose Maria Ruiz Moreno*

- **Francine Behar-Cohen** - Rôle of MR antagonistes in dome shape macula
- **Suzanne Yzer** - Multimodel imaging on posterior staphyloma
- **JM Ruiz-Moreno** - OCT-A and Pathologic Myopia and Myopic Maculopathy: OCTA in myopic CNV
- **Jorge Ruiz-Medrano** - Myopic maculopathy classification: ATN

**Discussion (10')**

**17.57 – 18.16 - Myopia and Myopic Maculopathy**

*Chairs: Michel Puech, Svetlana Zhukova*

- **Svetlana Zhukova, Tatiana Iureva** - Role of short ciliary arteries in myopic choroidal neovascularization
- **Jean Francois Le Rouic** - From Lacquer’s crack to chorioretinal atrophy. A nine-year follow-up with SD-OCT

**Discussion (5')**

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**SATURDAY**

**Saturday MORNING**

*Hall A*

**7.45 – 8.30 - Hall A: Symposium HEIDELBERG**

**8.30 – 9.15 - Foveal avascular zone**

*Chairs: Yali Jia, Toco Chui*

- **Toco Y Chui** - Assessment of FAZ enlargement in different stages of DR using en face OCT reflectance and OCTA
9.15 – 10.00 - Anatomy and function of retina and capillaries

Chair: Alain Gaudric

Michel Paques - The 3D anatomy of macular capillaries
Yali Jia - Four capillary networks in diabetic retinopathy revealed by wide-field OCTA
Carlo Lavia, Alain Gaudric - Retinal capillary plexuses from the fovea to equator
Amani Fawzi - Differential regulation of the 3 capillary networks, implications in health and diabetes
David Sarraf - Pathoanatomy of the DCP and Associated Clinical Consequences

Discussion (10')

10.00 – 10.45 - Retinal Ischemia

Chair: Francesco Bandello

Alain Gaudric - Do Anti-VEGF really recanalize retinal capillaries?
Shoba Sivaprasad - Evaluation of capillary non-perfusion in a multicenter trial
Lee Jampol - DRCR.net - Retinal non-perfusion, perimeter and Anti-VEGF therapy
José Cunha-Vaz - Which is the best approach to proliferative diabetic retinopathy
Rami Weitz - Adaptive Optics SLO Imaging of Intermittent Capillary Perfusion on OCT Angiography

Discussion (10')

10.45 – 11.51 - Visible light OCT

Chairs: Yali Jia, Hao Zhang

Hao Zhang - OCT oxymetry OCT oximetry (rat and human)
Vivek J. Srinivasan - OCT oxymetry
Ji Yi - OCT oxymetry
Yali Jia - Visible-light OCT angiography and oximetry in rat retina
Bernhard Baumann - Visible-light OCT
Marinko Sarunic - Visible light sensorless adaptive optics for multi-modality retinal imaging
Shuliang Jiao - Visible-light OCT-based multimodal retinal imaging
Hiroshi Ishikawa - OCT oximetry (clinical data)

Discussion (10')

11.51 – 12.06 - Keynote Lecture

Quan Dong Nguyen - Advanced Ocular Imaging in the Management of Uveitis

12.06 – 12.58 - Quantitative Strategies in the Evaluation of Retinal Disease using OCT/OCTA and Ultra-Wide Field Based Platforms

Chairs: David Sarraf, Justis Ehlers

Sumit Sharma - Higher Order OCT Characterization and Quantitative Feature Extraction in Diabetic Macular Edema
Justis Ehlers - Quantitative UWFA in Diabetic Eye Disease: Opportunities for New Assessment of Disease Activity
Katherine Talcott - Macular Ellipsoid Zone Integrity Quantification in Retinal Diseases
Daniel Martin - Challenges in Clinical Trials with Novel Quantification Strategies and Emerging Imaging Modalities
Francesco Pichi - Quantitative analysis of choroidal granulomas using swept source OCTA
Sunil Srivastava - Quantitative Imaging in Uveitis

Discussion (10')

13.00 – 13.45 - Hall A: Lunch Symposium TOPCON
(Lunch boxes available for the first 250 attendees)
Saturday MORNING
Hall B

OCT and surgery
8.30 – 9.22 - OCT and Surgery 2
Chair: Stanislao Rizzo
Stanislao Rizzo - Intraoperative OCT: a necessary tool for the right decision?
Francesco Faraldi - Epiretinal macular membranes: the role of multimodal imaging.
Paolo Lanzetta - OCT and multimodal imaging in macular hole surgery: are there further prognostic parameters?
Francesco Boscia - OCT and multimodal imaging In Retinal Detachment
Cesare Mariotti - AMD complications: the role of multimodal imaging in surgical decision-making
Daniela Bacherini - Clinical case discussion: what is your OCT-based surgical choice?
Discussion (10’)

9.22 – 10.14 - Advances in imaging technology and methods
Chairs: James Fujimoto, Robert J. Zawadzki
Thomas Ach - Fundus autofluorescence: improved methods for advanced emission signal analysis
Michael Pircher - Extending the field of view in AO-OCT
Robert J. Zawadzki - Progress on cellular resolution light evoked retinal ophthophysiology (aka. optoretinography).
Kenny Yankai Tao - Multimodality handheld imaging technologies for point-of-care ophthalmic OCT and OCT-A
Eric Moult - Methods for analyzing choriocapillaris impairment with OCTA
James Fujimoto - Advances in imaging speed and resolution using SS-OCT and SD-OCT
Discussion (10’)

10.14 – 11.01 - Artificial Intelligence in OCT and OCTA
Chairs: Yali Jia, Xincheng Yao
Aaron Lee - OCT
Hiroshi Ishikawa - AI in Glaucoma: Clinical Applications
Marinko Sarunic - Deep Learning for OCT Angiography in Diabetic Retinopathy
Xincheng Yao - OCTA Machine learning based OCTA classification of retinopathies
Linda Zangwill - AI in Glaucoma
Yali Jia - Distinguishing capillary dropout from signal reduction artifacts on OCTA
Discussion (5’)

11.01 – 11.41 - The state-of-the-art in artificial intelligence
Chairs: Ursula Schmidt-Erfurth, Paolo Lanzetta
Michael Abramoff - Why does healthcare need AI? Big data and resource optimization
Ursula Schmidt-Erfurth - The dawn of artificial intelligence: An introduction to AI, machine learning, deep learning, some mentioning on applications in ophthalmology.
Bianca Gerendas - Machine learning applications to doctor-patient interactions
Daniele Veritti, Paolo Lanzetta - Behind the mask: machine morality. Ethics, moral and legal liability on AI in health care
Hrvoje Bogunovic - Breaking the black box: a responsible innovation of artificial intelligence
Discussion (5’)

11.41 – 12.00 - Deep Learning Artificial Intelligence
Chairs: Guotong Xie, Min Wang
Guotong Xie, Chuanfeng Lv, Min Wang, Qienyuan Zhou, Jay Wei, Xinghai Sun - Multiple Retinal Lesion Detection and Quantification for OCT Screening Based on Deep Learning Methods
Min Wang, Lilong Wang, Qienyuan Zhou, Yulia Wolfson, Xinghua Sun, Chuanfeng Lv, Guotong Xie, Jay Wei - A study of OCT artificial intelligence screening method for ocular fundus diseases
Discussion (5’)

12.00 – 12.47 - Artificial Intelligence
Chairs: Marion Munk, Shin Kadomoto, Karl Csaky, Daniel Pauleikof
Marion Munk - Extraction of patient specific information in the wild
Karl Csaky - How Human Computational Analysis Input in Machine Learning Allows for Improved Detection of OCT Structures in Intermediate AMD
Shin Kadomoto, Akihito Uji, Yuki Muraoka, Makihira Tomoyuki, and Akitaka Tsujikawa - The Impact of Deep Learning Reconstruction on OCT Angiography Image
Benjamin Y. Xu - Artificial Intelligence and Automated Analysis of Anterior Segment OCT Images
Yasmine Derradji, Agata Mosinska, Emy Valk Bouman, Sandro De Zanet, Carlos Ciller, Irmela Mantel - Artificial Intelligence and Geographic Atrophy Analysis in AMD
Daniel Pauleikof - AI OCT-analysis and OCTA-quantification to differentiate CNV in exudative AMD

Discussion (5')

13.00 – 13.45 - Hall B: Lunch Symposium MILOFTALMICA
(Lunch boxes available for the first 100 attendees)

Saturday MORNING
Hall C

Imaging

8.30 – 9.15 – The role of OCT-A in multimodal imaging
Chair: Giovanni Staurenghi

Mariano Cozzi
Marco Pellegrini
Alessandro Invernizzi
Anna Paola Salvetti
Giovanni Staurenghi

9.15 – 10.21 - Imaging 2
Chairs: Theodore Leng, Michel Paques, Francine Behar Cohen, Jean Michel Muratet
Wolfgang Drexler - Towards ophthalmic spectral and swept source OCT on a chip at 840 nm
Theodore Leng - Multimodal high-resolution imaging of epiretinal membranes including adaptive optics
Michel Paques - Organization of macular capillaries: A 3D histology study
Jean Michel Muratet - Oct Angiography and non mydriatric confocal retinography
Francine Behar Cohen - Les cellules glaires de la macula
Francine Behar Cohen - L'imagerie in vivo des cellules de l'épithélium pigmentaire chez l'homme par technique TOPI
Giovanni Staurenghi - The differences between Sd-OCT and SS OCT
Timur Shaimov, Venera Shaimova, Alexey Galin, Ruslan Shaimov, Alexey Fomin - New OCT technique: from the center to the periphery
Discussion (10')

10.21 – 12.27 - Imaging 3
Do you think all the OCTA are the same? Comparison of OCT-A images between devices
Chairs: Giovanni Staurenghi, Joseph Carroll
Brandon Lujan - Why do your OCT-A images look better than ours
Giovanni Staurenghi - Do you think all the OCT-A are the same?
Marion Munk - Qualitative and quantitative differences of OCTA devices from a reading center perspective
Peng Xiao – Recent progress in full-field OCT for ophthalmic imaging
Joseph Carroll - Comparing FAZ metrics from different OCT-A devices
Leopold Schmetterer - Large vessel removal in OCTA
SriniVas Sadda - Quantitative OCT-A metrics from different OCT-A instruments
Adrian Podoleanu, Ramona Cernat, Adrian Bradu, Yong Hu, Manuel Marques - From Master Slave OCT to down-conversion OCT for fast en-face imaging of the retina
Discussion (10')
**12.27 – 13.12 - Is FA still useful in OCTA era?**
*Chair: Maria Cristina Savastano*

- **Amani Fawzi** - Diabetic Retinopathy: OCTA or FA?
- **David Sarraf** - New diseases discovered by OCTA – PAMM
- **Maria Cristina Savastano** - NV incidence in CSC by OCTA
- **Stanislao Rizzo** - OCTA in epiretinal membrane removal: predictive information?
- **Giuseppe Querques** - In which diseases is it still necessary to use FA?

**Discussion (10')**

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**Saturday MORNING**
**Hall D**

**8.30 – 9.01 - Macular Degeneration, CNV 2**

- **Anat Loewenstein** - Early detection and home monitoring of macular degeneration
- **Amir Kashani** - RPE Monolayer Transplantation for Severe Vision Loss Associated with Geographic Atrophy and Advanced Dry Age Related Macular Degeneration
- **Anat Loewenstein** - Slow release devices for the management of AMD

**Discussion (10')**

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**9.01 – 9.46 - 43 – 45’ - Macular degeneration, CNV 3**

*Chairs: Min Wang, Philip J. Rosenfeld, Sylvia Nghiem Buffet*

- **Philip J. Rosenfeld** - A Comparison Study of Polypoidal Choroidal Vasculopathy Imaged with Indocyanine Green Angiography and Swept Source OCT Angiography
- **Irmela Mantel** - Determining complete atrophy on SD-OCT using a deep learning algorithm
- **Min Wang** - Evaluating neovascularization with swept source OCT
- **Sylvia Nghiem Buffet** - OCT angiography perpapillary vessel perfusion density in wet AMD patients with repeated anti-VEGF injections
- **Lisette M. Smid, Koenraad A. Vermeer, King T. Wong, José P. Martinez, Mirjam E.J. van Velthoven** - Observer agreement for detection of OCT-A characteristics associated with type 3 neovascularization

**Discussion (10')**

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**9.46 – 10.05 - 44 – 19’ - Quiescent Macular Neovascularization**

- **Donato Colantuono, Alexandra Miere, Vittorio Capuano, Riccardo Sacconi, Enrico Borrelli, Giuseppe Querques, Eric Souied** - Quantitative deep capillary plexus analysis in optical coherence tomography angiography: quiescent neovascularization versus intermediate and neovascular AMD
- **Rita Serra, Florence Coscas, Antonio Pinna, Diogo Cabral, Gabriel Coscas, Eric H Souied** - Quantitative optical coherence tomography angiography features of treatment-naïve quiescent choroidal neovascularization in age-related macular degeneration

**Discussion (5')**

**10.05 – 10.50 – 45 - Role of Centralized Reading Amidst the Emergence of Artificial Intelligence – A Panel Discussion**

*Chairs: Quan Dong Nguyen, Syed Mahmood Shah*

- **Barbara Blodi**
- **Michael Ip, SriniVas Sadda**
- **Brandon Lujan**
- **Yasir J. Sepah**
- **Nadia Waheed**
- **Sebastian Wolf**

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**Saturday MORNING**
**Hall E**

**8.30 – 10.45 - Quick Fire Session**

*Chairs: Anita Leys, Martine Mauget Faysse, Gabriele Thumann*
Iannis Giannakis - Management of late occurrence of fingolimod associated macula oedema (FAME)  
Francoise Belloir Furet - Dépistage de la sténose carotidienne et prévention des AVC par l'Angio Oct  
Evgeny Gelman, David Zadok, Joel Hanhart - Not all symptomatic CNVs leak  
Marina Banteka, Beckie MacPhee, Annegret Dahlmann-Noor, Thomas Dhanes - Octa in probable paediatric ocular sarcoidosis  
Robert Steigerwalt - A case of paracentral acute middle maculopathy (PAMM) treated by prostaglandin E1  
Neda Abraham, Karine Hawa - Case report: Use of OCT-A in case of naevus becoming melanoma  
Nesrine Abroug, Molkha Khairallah, Tarek Dridi, Wejdane Nebi, Bechir Jelliti, Sana Khochtali, Moncef Khairallah - Swept-source OCT angiography in tubercular retinal vasculitis  
Amal Kadri, Imen Ksiaa, Molkha Khairallah, Hager Ben Amor, Sonia Attia, Sana Khochtali, Moncef Khairallah - Swept-source OCT angiography may show choriocapillaris flow reduction in typical Multiple Evanescent White Dot Syndrom  
Imen Ksiaa, Safa Ben Aoun, Molkha Khairallah, Sourour Zina, Sihem Meddeb, Sana Khochtali, Moncef Khairallah - Multimodal imaging of unilateral acute maculopathy related to hand, foot, and mouth disease  
Sana Khochtali, Rim Kmiha, Maroua Rhomdhane, Jihene Nemria, Zohra Tritar, Bechir Jelliti, Moncef Khairallah - Swept-source OCT and OCT angiography in Purtscher retinopathy: a case report  
Hager Ben Amor, Amal Kadri, Imen Ksiaa, Mosaab Mefteh, Sonia Attia, Sana Khochtali, Moncef Khairallah - Swept-source OCT and OCT angiography in acute VKH disease  
Swept-source OCT and OCT angiography in punctate inner choroidopathy  
Sana Khochtali, Amal Kadri, Sourour Zina, Molkha Khairallah, Olfa Haj Taher, Sonia Attia, Moncef Khairallah - Swept-source OCT and OCT angiography in punctate inner choroidopathy  
Nesrine Abroug, Wejdane Nabi, Mohamed Ali Gargouri, Kais Ben Abderrahim, Bechir Jelliti, Emna Salhi, Moncef Khairallah - Swept-source OCT and OCT angiography in posterior microphthalmos  
Imen Ksiaa, Safa Ben Aoun, Kais Ben Abderrahim, Hager Ben Amor, Bechir Jelliti, Sana Khochtali, Moncef Khairallah - Swept-source OCT in the follow-up of patients with chronic VKH disease  
Aude Ambresin, I. Papasavvas, JA. Pournaras, J Vaudaux, Vasileia Chatzistergiou - Characteristics of foveal hypoplasia on OCTAIL  
Ali Akbar Saber Moghaddam, Hamid Jafarzadeh, Mojtaba Abrishami - Quantifying Microvascular and Structural Macular Changes in Active Thyroid-Associated Ophthalmopathy  
Baur Joel, Wiest Maximilian, Stemmlle J., Zweifel Sandrine A. - OCT-Angiography in Patients with Popper's Maculopathy (PM)  
Fatiha Karouat, Rachid Garout - When therapeutics complicate a clinical situation  
Khaled El Matri, Yousra Falhouf, Asma Hassairi, Rim Bouraoui, Ahmed Chebil, Leila El Matri - Swept source OCT angiography in aneurysmal type 1 neovascularization  
Khaled El Matri, Yousra Falhouf, Asma Hassairi, Issam Elleuch, Nebras Chaker, Leila El Matri - OCT Angiography of the choriocapillaris in Retinitis Pigmentosa  
João Bernardes, João Pedro Marques, Mário Soares, Pedro Melo, Dora Teixeira, Teresa Mesquita, Rufino Silva - Multimodal Retinal Imaging in a large cohort of Pseudoxanthoma Elasticum  
Kais Benabderrahim, Rahma Mesfar, Amira Trigui, Jamel Feki - Anterior Segment Optical Coherence Tomography in Anterior Scleritis  
Kais Benabderrahim, Rahma Mesfar - Anterior Segment Optical Coherence Tomography in the follow up of Corneal Hypersensitivity Reaction
Chairs: Florence Coscas, Jakob Siedlecki, Giuseppe Querques, Leila El Matri, Claudio Furino

Lutsenko Nina, Rudycheva Olga, Isakova O., Kryrylova T., Unguryan N, Yatsun A. - Modern capabilities of OCT-angiography in definition of diagnostic signs of retinal angiomatous proliferation

Jakob Siedlecki, Cheryl Fischer, Benedikt Schworm, Karsten Kortüm, Ricarda Schumann, Armin Wolf, Siegfried G. Priglinger - Impact of Sub-Retinal Fluid on the Long-Term Incidence of Macular Atrophy in Neovascular Age-related Macular Degeneration in anti-VEGF Treat & Extend Regimen

Maria Oliva Grassi, Claudio Furino, Nicola Recchimurzo, Giovanni Alessio - Pre-choroidal cleft in neovascular AMD: OCT and OCTA analysis during anti-VEGF treatment

Florence Coscas, Diogo Cabral, Carlos Geraldés, Ana Papoila, Gabriel Coscas, Marco Lupidi, Salomon Yves Cohen, Eric Souied - Quantitative Optical Coherence Tomography Angiography Biomarkers in a Treat-and-Extend Dosing Regimen: Clinical Validation in Treatment Naïve Neovascular Age-Related Macular Degeneration


Khaled El Matri, Yousra Fal foul, Ahmed Chebil, Zakaria Dekli, Rim Bouraoui, Leila El Matri - OCT Angiography in exudative AMD: Comparison between type 1 and type 2 CNV

Discussion (5')

11.32 – 12.09 - Macular Degeneration CNV

Chairs: Rufino Silva, Giuseppe Querques

Giuseppe Querques - OCTA in type 3 macular neovascularization.
Rufino Silva - Polypoidal choroidal neovascularization in a Caucasian Population
Maria Luz Cachulo - Natural History of Quiescent Choroidal Neovascularization
Joao Pedro Marques - OCT-A metrics can predict early functional improvement in exudative AMD

Discussion (5')

Saturday AFTERNOON

Hall A

14.00 – 14.59 - Wide-field imaging

Chairs: Ursula Schmidt Erfurth, Paolo Lanzetta

Julia Hafner - Is the periphery relevant in staging diabetic retinopathy?
Andreas Pollreisz - Wide-field OCT-A imaging
Amani Fawzi - Which parameters are relevant in OCT-A wide-field imaging
Lee Jampol - Does anti-VEGF therapy improve the diabetic retinopathy score
Valentina Sarao, Paolo Lanzetta - How does wide-field imaging work in the clinical practice
Ruikang Wang - Ultrawide OCTA to reach peripheral retina
Jean Francois Korobelnik - Comparison of wide field OCT-A and wide field color images in the screening of diabetic retinopathy

Discussion (10')

14.59 – 16.00 - Glaucoma

Chair: Linda Zangwill

Yali Jia - Can OCT angiography replace visual field in glaucoma evaluation?
Richard Rosen - Parapapillary retinal and choroidal vascularity in glaucoma
Harsha Rao - OCTA in angle closure glaucoma: an Indian experience
Linda Zangwill - OCTA in Glaucoma Management: Opportunities and Challenges
Natalia Kurisheva - Does OCTA help in detection of glaucoma progression?
Kyung Rim Sung - Effect of trabeculectomy on parapapillary and macular microcirculation
Michel Puech - Correlation between structure and function with OCTA and electrophysiology

Discussion (5')

16.00 – 16.21 - Glaucoma

Chairs: Linda Zangwill, Michel Puech

Michel Puech, Mourtaza Aimadaly - OCT-A of radial parapapillary vascularization and Pattern ERG in case of glaucoma patients
Natalia Kurisheva - Use of OCT-A in glaucoma
Michel Puech, Charlotte Sevin, Marie Julie Bovis - Anterior segment OCT and anterior iris root insertion in case of narrow angle

16.21 – 16.54 – Glaucoma/Electrophysiology

Chairs: Benedetto Falsini, Michel Puech, Quan Dong Nguyen

Benedetto Falsini – Glaucoma electrophysiology
Quan Dong Nguyen - Frequency Domain Flicker ERG: New Trends in management of Retinal Diseases
Will Ayliffe - Integrating Objective Functional Assessment in the Everyday Clinical Practice
Rachid Garout, Fatiha Karaouat - Glaucoma and OCTA: the beginnings of a promising exploration

Discussion (5’)

16.54 – 17.53 - Definition and standardization of qualitative and quantitative OCT-A metrics

Chair: Marion Munk

Dimitra Skondra - Nomenclature and definitions of qualitative OCTA parameters
Stela Vujosevic - Nomenclature and discrepancies of quantitative OCT-A parameters
Nadja Waheed - Consensus on nomenclature in OCTA for research and clinical trials
Grace Richter - Which metrics -and when? Qualitative and quantitative OCT metrics in glaucoma
Francesco Pichi - Differences and discrepancies of qualitative and quantitative parameters in inflammatory and non-inflammatory retinal vascular diseases
Marion Munk - Challenges of OCTA parameters in clinical trials

Discussion (10’)

Saturday AFTERNOON
Hall B

14.00 – 15.03  - Technological Developments by Clinicians and Engineers

Chairs: Wolfgang Drexler, Philip J. Rosenfeld

Optovue - Qienyuan Zhou
Zeiss
Nidek
Topcon
Heidelberg Engineering
Optopol - Arkadiusz Chalecki
Mocean
Centervue
Canon - Ori Zahavi

15.03 – 16.02 - Optic Nerve

Chairs: Richard Rosen, Joanna Golebiewska, Ouryda Ouhadj

Richard Rosen - Changes in macular and optic nerve perfusion in migraine imaged by OCTA perfusion density
Joanna Golebiewska, Agnieszka Oleszczuk, Joanna Brydak-Godowska - Optical coherence tomography angiography of the peripapillary retina and superficial retinal plexus in optic disc drusen
Umur Kayabasi - Macular Ganglion Cell Analysis in Neurodegenerative Diseases.SD-OCT and OCT-A. findings in Methanol Optic Neuropathy
Rita Gama, Rute Sousa da Costa, Tânia Nom, Catarina Relha, Fábio Nascimento- Sylvia Gaspar, Carina Esteves - Differences of optic discs parameters between children and adults- An optical coherence tomography analysis
Umur Kayabasi - OCT-A. of peripapillary vessel density and retinal perfusion in compressive lesions of the optic nerves
Etienne Bodart - Clinical study of macular capillary densities in optical neuropathies
Lydia Merabtene, Ouryda Ouhadj - OCT in functionnal explorations of inflammatory optic neuropathy

Discussion (10’)

16.02 – 17.01 - Neuro degenerative Disorders
Chair: Albert J. Augustin

Albert J. Augustin - OCT Angiography and Multimodal Imaging in neuro-ophthalmology - Introduction
Richard Rosen - Papilledema and Pseudotumor cerebri: what role for OCT Angiography?
Umur Kayabasi - Analysis of optic disc and retinal perfusion with OCT Angiography in neurodegenerative disease
Marco Lupidi - The role of OCT and OCT Angiography in Leber’s Hereditary Optic Neuropathy
Gilda Cennamo - Assessment of optic disc perfusion in ischemic optic neuropathy
Umur Kayabasi - Correlation of retinal plaques with inner foveal thickness measurements in Alzheimer’s (SD- OCT study)
Leila El Matri - OCT Angiography findings in multiple sclerosis

Discussion (10’)

17.01 – 17.53 - Angio-OCT and En Face OCT in Neuro-Ophthalmic Diseases

Chairs: Y. Joyce Liao, Randy Kardon

Heather Moss - OCT Imaging of Papilledema
Randy Kardon - OCT Angiography in Neuro-ophthalmic Diseases
Y. Joyce Liao - OCT and OCT Angiography Imaging of Optic Disc Drusen
Eric Gaier - OCT Angiography Findings in Ischemic Optic Neuropathy
Fiona Costello - OCT and OCTA in Multiple Sclerosis
Andrew Lee - OCT in Space

Discussion (10’)

17.53 – 17.26 - Other retinal Disorders, oncology

Chair: Leonidas Zografos

Maria Grazia Sammarco, Andrea Scupola, Monica Maria Pagliara, Maria Antonietta Blasi - Multimodal Imaging of Intraocular Tumors
Ourida Ouhadj, Merriem Benmeriem, Lydia Merabtene, Amine Haddad, Mahfoud Belabelouahab - Intravitreal injection of Melphalan and Retinoblastoma
Gabriela Grimaldi, Ranjan Rajendram, Catherine Egan - Multimodal longitudinal imaging features of a case of bilateral neoplastic serous macular detachment
Marco Pellegrini - EFI-OCTA nello studio della retinopatia da radiazioni

Discussion (5’)

Saturday AFTERNOON

Hall C

14.00 – 14.52 - OCT Anterior segment

Chair: Michel Puech

Karine Hawa, Neda Abraham - Use of OCT Casia 2 for lens equator analysis: a new tool for ELP and IOI calculation
Michel Puech - Use of OCT Casia 2 for Anterior and posterior lens curvature measurement
Christophe Baudouin, Emmanuelle Brasnu - OCT-A and ocular surface analysis
Neda Abraham, Karine Hawa - OCT-A of the iris
Dan Reinstein, Marine Gobbe - Corneal epithelial mapping and keratoconus diagnosis
Adil El Maftouhi - Epithelium mapping and Dry eyes

Discussion (10’)

14.52 – 15.55 - Session Imaging 7

Chairs: Ourida Ouhadj, Xavier Zanlonghi, Mojtaba Abrishami, Ioannis P. Theocharis

Amira Hamzaoui, Ourida Ouhadj - Discordant OCT results Vs GCC: what to do? Which retain?
Gabriela Grimaldi, Ranjan Rajendram, Angela Rees, Catherine Egan - Retinal findings in patients with sickle cell retinopathy evaluated with colour ultra-wide field retinography and optical coherence tomography angiography
Marine Sourdril, Xavier Zanlonghi, Tanguy Bizeau, Chloé Werner, Anais Werner, Nadja Rousseau - 100 OCT HRA consecutive in children under 5 years old with rare disease
Mojtaba Abrishami - Effects of Fatigue on Image Quality of Optical Coherence Tomography Angiography
Xincheng Yao, Taeyoon Son, Minhaj Alam, Jennifer I. Lim, and Devrim Toslak - Near infrared OCT oximetry and geometric feature analysis guided artery-vein classification in OCTA
Xincheng Yao, Taeyoon Son, Tae-Hoon Kim - Functional OCT monitoring of retinal neurovascular response and hyaloid vascular regression in wild-type and retinal degeneration mice
Mojtaba Abrishami - Multimodal Imaging in Posterior Microphthalmos
Ioannis P. Theocharis - A Structural OCT-based unifying concept of the etiology of macula disease
Discussion (5’)

Saturday AFTERNOON
Hall D

14.00 – 15.10 –Young Ophthalmologists Retinal Imaging Society (YORIS)

Pupil vs teacher

Chairs: Enrico Borrelli, Daniela Bacherini, Rodolfo Mastropasqua

Assaf Hilely vs David Sarraf - Nonneovascular Exudative AMD (NEAD)
Marco Lupidi vs Cardillo Piccolino - Dye-Angiography vs OCT-Angiography in CSC
Maria Cristina Savastano vs Marco Rispoli - Dark Halo in Neovascularizations
Vittorio Capuano vs Giuseppe Querques - Quiescent CNV: new entity or subclinical type 1 neovascularization?
Daniele Veritti vs Paolo Lanzetta - Should non-exudative CNV be treated when first detected on OCT angiography?
Marco Nassisi vs SriniVas Sadda - Imaging biomarkers in intermediate AMD
Riccardo Sacconi vs Francesco Bandello - Imaging biomarkers in geographic atrophy

Image gallery Joe Carroll, Brandon Lujan