

# International Retinal Imaging Symposium 2022 Preliminary Program May 6-7, 2022

# FRIDAY, MAY 6, 2022 (8:45 AM – 2:45 PM ET)

8:45 – 9:00 AM WELCOME REMARKS

David Sarraf, MD

9:00 - 10:10 AM

**SESSION 1: AMD I/PACHYCHOROID DISEASE** 

Moderators: Gemmy Cheung, MD, FRCOphth and Eric Souied, MD, PhD

9:00 - 9:10

Progression of Quiescent Pachychoroid Neovasculopathy to Polypoidal Choroidal Vasculopathy Won Ki Lee, MD, PhD

9:10 - 9:20

Volumetric Assessment of PED using Manual and Automated Techniques as a Predictive Biomarker in Eyes Treated for PCV Kelvin Teo, MBBS, FAMS

9:20 - 9:30

Features of Polypoidal Choroidal Vasculopathy seen on Fluorescein Angiography *Colin S. Tan, MD* 

9:30 - 9:40

To Evaluate the Influence of OCT Features on Vision in nAMD Eyes with Fibrosis *Gemmy Cheung, MD, FRCOphth* 

9:40 - 9:50

Biomarkers associated with Large Submacular Hemorrhage onset in the context of Neovascular AMD *Eric Souied, MD, PhD* 

9:50 - 10:00

Pachychoroid and Central Serous Chorioretinopathy in Fellow Eyes with Circumscribed Choroidal Hemangioma – a Series of 4 Cases *Muna Bhende, MS* 

10:00 - 10:10

Inner and Outer Choroidal Changes in the Fellow Eye of Patients with Unilateral Central Serous Chorioretinopathy

Enrico Borrelli, MD

#### 10:10 - 10:50 AM

**SESSION 2: ARTIFICIAL INTELLIGENCE I** 

Moderators: Amitha Domalpally, MD, PhD and SriniVas R. Sadda, MD

10:10 - 10:20

Denoising Swept Source Optical Coherence Tomography Volumetric Scans using a Deep Learning Model Gerardo Ledesma-Gil, MD, FICO

10:20 - 10:30

Influence of Race on Training Data Quality for Artificial Intelligence (AI) Algorithms Amitha Domalpally, MD, PhD

10:30 - 10:40

Effectiveness of a Single Exam Artificial-Intelligence based Retinopathy of Prematurity Prediction Model in three Asian populations

J. Peter Campbell, MD, MPH

10:40 - 10:50

Machine Learning Quantification of Fluid Volume in Eyes with Retinal Vein Occlusion undergoing Treatment with Aflibercept: the REVOLT Study Netan Choudhry, MD, FRCSC

#### 10:50 - 11:30 AM

**SESSION 3: ARTIFICIAL INTELLIGENCE II** 

Moderators: Amitha Domalpally, MD, PhD and SriniVas R. Sadda, MD

10:50 - 11:00

Deep Learning Based Optimized Diabetic Retinopathy Screening System for Resource Constraint Devices Rehman Siddiqui, FRCS(Ed), FRCOphth, FACS, FASRS

11:00 - 11:10

Deep Learning-Based Classification of Diabetic Retinopathy with or without Macular Ischemia Using Optical Coherence Tomography Angiography Images

Alexandra Miere, MD, PhD

11:10 - 11:20

Machine Learning to Predict Development of Macular Atrophy Under Anti-VEGF Therapy in Patients with nAMD

Marion Munk, MD, PhD

11:20 - 11:30

Automated Identification of Incomplete and Complete Retinal Epithelial Pigment and outer Retinal Atrophy Using Machine Learning

SriniVas R. Sadda, MD

# 11:30 AM - 12:00 PM SATELLITE SYMPOSIA (non-CME)

11:30 - 11:45 AM

Heidelberg Engineering: High Resolution Spectralis OCT *Richard F. Spaide, MD* 

11:45 - 11:55 AM

Iveric Bio: Evaluation of GA Growth Parameters and Impact on Foveal Progression: Post Hoc Analysis of

the GATHER1 Trial Pravin U. Dugel, MD

11:55 AM - 12:00 PM

Discussion/Wrap Up

12:00 - 12:50 PM

**SESSION 4: IMAGING I** 

Moderators: Francesco Bandello, MD, FEBO and K. Bailey Freund, MD

12:00 - 12:10

Volume Rendering of Deep Retinal Age-Related Microvascular Alterations (DRAMA)

K. Bailey Freund, MD

12:10 - 12:20

Comparison of Peripheral Extension, Acquisition Time and Image Chromaticity of Clarus, Optos, and **EIDON Systems** 

Francesco Bandello, MD, FEBO

12:20 - 12:30

Ultrawide Field Handheld Optical Coherence Tomography

Yifan Jian, PhD

12:30 - 12:40

Imaging the Vitreous with a Novel Boosted Optical Coherence Tomography Technique

Richard F. Spaide, MD

12:40 - 12:50

Ophthalmic Artery Angioplasty for Age-Related Macular Degeneration

Anibal A. Francone, MD

12:50 - 1:30 PM

**SESSION 5: OCT IMAGING** 

Moderators: K. Bailey Freund, MD and Francesco Pichi, MD

12:50 - 1:00

Objective Quantification of Posterior Segment Inflammation: Measuring Vitreous Haze and Cells Using

**Optical Coherence Tomography** 

Francesco Pichi, MD

1:00 - 1:10

RIPLs, an Optical Coherence Tomography Biomarker of Cardiovascular Disease

Mathieu F. Bakhoum, MD, PhD

1:10 - 1:20

High Variation in Inner Retinal Reflectivity Predicts Poor Visual Outcome in Patients with Central Retinal

Vein Occlusion: Application of Optical Intensity Ratio Analysis to the SCORE2 Dataset

Nitish Mehta, MD

1:20 - 1:30

Optical Coherence Tomography Predictors of 3-Year Visual Outcome for Type 3 Macular Neovascularization

Riccardo Sacconi, MD, FEBO

1:30 - 2:40 PM

**SESSION 6: OCT-A IMAGING** 

Moderators: Alain Gaudric, MD and Richard B. Rosen, MD

1:30 - 1:40

OCTA Derived Vessel Skeleton Density Versus Flux and their Associations with Systemic Determinants of Health

Amir H. Kashani, MD, PhD

1:40 - 1:50

Phenotyping of Retinal Neovascularization in Ischemic Retinal Vein Occlusion Using Wide Field OCT Angiography

Hagar Khalid, MD

1:50 - 2:00

From Outer Retinal Capillary Proliferation to Subretinal New Vessels in Mactel 2 *Alain Gaudric, MD* 

2:00 - 2:10

Anomalies of the Retinal Capillary Plexuses in Coats' Disease seen on OCT Angiography *Valerie Krivosic, MD* 

2:10 - 2:20

Retinal Capillary Perfusion Heterogeneity in Diabetic Retinopathy Detected by Optical Coherence Tomography Angiography Eduardo Navajas, MD, PhD

2:20 - 2:30

Dynamic OCT Angiography and Adaptive Optics SLO in the Microvascular Assessment of Sickle Cell Retinopathy

Richard B. Rosen, MD

2:30 - 2:40

Investigating the Utility of Near Infrared Reflectance (NIR) Imaging for Diabetic Retinopathy Screening Yasha S. Modi, MD, MHS

2:40 – 2:45 CLOSING REMARKS

David Sarraf, MD

2:45 PM *ADJOURN* 

### <u>SATURDAY, MAY 7, 2022 (8:45 AM – 1:35 PM ET)</u>

8:45 – 9:00 AM WELCOME REMARKS

David Sarraf, MD

9:00 - 9:50 AM

**SESSION 7: IMAGING II** 

Moderators: Richard F. Spaide, MD and Cynthia A. Toth, MD

9:00 - 9:10

Seven-Year Follow-Up of Outer Retina-Retinal Pigment Epithelium-Choroid in Patient with Central Retinal Chorioretinopathy

Seung Young Yu, MD

9:10 - 9:20

Ultra-Widefield OCT Imaging of Scleral Curvature Changes in Highly Myopic Children and Adolescents *Kyoko Ohno-Matsui, MD, PhD* 

9:20 - 9:30

Three-Dimensional Choroidal Contour Mapping in Pathology: Comparison with Healthy Controls *Jay Chhablani, MD* 

9:30 - 9:40

Improving Vascular Severity Assessment in ROP Cynthia A. Toth, MD

9:40 - 9:50

The Benefits of Using FLIO (Fluorescence Lifetime Imaging Ophthalmoscopy) in Patients with Macular Telangiectasia Type 2 (MACTEL)

Lydia Sauer, MD

9:50 - 10:20 AM

**SESSION 8: INHERITED RETINAL DISEASE** 

Moderators: Anita Agarwal, MD and David Sarraf, MD

9:50 - 10:00

Longitudinal Analysis of Functional and Structural Outcome Measures in PRPH2-Associated Retinal Dystrophy

Rachael Heath Jeffery, MChD, MPH

10:00 - 10:10

Retinal Autofluorescence Lifetimes in Best Macular Dystrophy Chantal Dysli, MD, PhD

10:10 - 10:20

Understanding Peripherin/RDS Phenotypic Variations Anita Agarwal, MD

#### 10:20 - 10:50 AM

#### **SESSION 9: INFLAMMATORY DISEASE AND BEYOND**

Moderators: Vishali Gupta, MD, MS and Frank G. Holz, MD

10:20 - 10:30

Automated Lesion Segmentation and Quantification for Prediction of Paradoxical Worsening in Patients with Tubercular Serpiginous-Like Choroiditis

Vishali Gupta, MD, MS

10:30 - 10:40

Idiopathic Multifocal Choroiditis with Serpiginous-Like Peripapillary Chorioretinal Atrophy *Kareem Moussa, MD* 

10:40 - 10:50

Advanced OCT Analysis of Biopsy Proven Vitreoretinal Lymphoma David Sarraf, MD

#### 10:50 - 11:40 AM

# 3<sup>rd</sup> ANNUAL LAWRENCE A. YANNUZZI AWARD LECTURE

10:50 - 10:55

Introduction of Yannuzzi Award

David Sarraf, MD

10:55 - 11:00

Introduction of 3<sup>rd</sup> Annual Yannuzzi Award Lecturer

K. Bailey Freund, MD

11:00 - 11:30

Visualizing Lipid Behind Aging Retina with Indocyanine Green Angiography (ASHS-LIA) – Addressing the Riddle of Neovascularization With and Without Drusen in AMD

Christine A. Curcio, PhD

11:30 - 11:40

Discussion

#### 11:40 AM - 12:10 PM

# **SATELLITE SYMPOSIA (non-CME)**

11:40 - 11:55 AM

Nidek: Advances in Imaging and Future Developments in Ophthalmology NIDEK *Riccardo Ferraris de Gaspare* 

11:55 AM - 12:05 PM

Regeneron: The Regeneron Way

Peter Byers

12:05 - 12:10 PM

Discussion/Wrap Up

12:10 - 12:50 PM

**SESSION 10: DIABETIC RETINOPATHY** 

Moderators: Michael S. Ip, MD and Giuseppe Querques, MD

12:10 - 12:20 PM

Re-Evaluating Diabetic Papillopathy Using Optical Coherence Tomography and Inner Retinal Sublayer Analysis

Josef Huemer, MD, FEBO

12:20 - 12:30 PM

Fluctuations in Diabetic Retinopathy Severity: Associated Factors and Prognostic Significance *Maria Vittoria Cicinelli, MD* 

12:30 - 12:40 PM

Level of Diabetic Retinopathy Severity Correlates to Degree of Quadrant Asymmetry in Both Single and Averaged Imaged OCTA Metrics

Jesse J. Jung, MD

12:40 - 12:50 PM

Long Term Changes in the Choroid Following PRP vs. Anti-VEGF Treatment for Proliferative Diabetic Retinopathy: An Analysis from the DRCR Retina Network Protocol S Dataset *Michael S. Ip, MD* 

12:50 – 1:30 PM SESSION 11: AMD II

Moderators: Christine A. Curcio, PhD and Philip Rosenfeld, MD, PhD

12:50 - 1:00

Consensus Grading of Persistent Hyper-Transmission Defects on En Face SS-OCT Images of Nonexudative Age-Related Macular Degeneration

Philip Rosenfeld, MD, PhD

1:00 - 1:10 PM

Evaluation of the Relative Ellipsoid Zone Reflectivity as a Biomarker for AMD Severity Frank G. Holz, MD

1:10 - 1:20 PM

Sub-Retinal Pigment Epithelium Tubulations in Non-Neovascular Age-Related Macular Degeneration Giuseppe Querques, MD, PhD

1:20 – 1:35 PM CLOSING REMARKS David Sarraf, MD

1:35 PM *ADJOURN*