



Euretina Special Focus Meeting
AI IN RETINA

6 – 7 March 2026
London, UK

Programme Overview



Friday 6th March

14.30 - 16.15

Session 1: AI literacy for Ophthalmologists: From Fundamentals to Practice

Chairs: David Merle, Ariel Ong

14.30 David Merle, Ariel Ong

Introduction - why AI literacy matters

14.40 Justin Engelmann

A technical perspective on AI for the clinician

15.00 Ariel Ong

How to read and critique a clinical AI paper

15.20 David Merle

Skills for the future retina specialist – de-skilling and new competencies

15.40 Mertcan Sevgi

Working with AI (human–AI collaboration)

16.00 All Speakers

Q&A and Demo

16.15 End of Session

16.15 - 16.30

Break

16.30 - 17.30

Session 2: Rapid-fire Session

Chairs: Bahram Bodaghi, Paolo Lanzetta

16.30 Jean-Francois Korobelnik

OCT images of the macula in the epidemiological study ALIENOR: First results

16.36 Catherine Egan

Solving blindness due to diabetes with AI: If not now, when?

Poster Presentations

16.42 Irati Arenzana

Predictive modelling of cardiovascular risk factors using OCT and fundus images with deep learning techniques

16.45 Fiammetta Catania

Deep learning for prediction of late recurrence of retinal detachment using preoperative and postoperative ultra-wide field imaging

16.48 Stefania Dominic

Evaluation of injection burden compared to discharge status for faricimab, aflibercept (2mg/8mg), and ranibizumab-biosimilar using AI-based clinical analytics

16.51 Oliver Leingang

Topographic forecasting of geographic atrophy progression from OCT-derived retinal biomarker maps using a neural ODE framework

16.54 Ariel Ong

Association of reticular pseudodrusen burden and dark adaptation in age-related macular degeneration

16.57 Andrea Olenik Memmel

Effectiveness of a hybrid artificial intelligence–human teleophthalmology screening system using portable fundus imaging in underserved rural populations

17.00 Tunde Peto

Why bigger is not always better: How choosing the right data and computation can enable effective AI

17.03 Andreas Pollreisz

Evaluation of Multimodal Large Language Models for Visual Understanding of Retinal Optical Coherence Tomography Scans

17.06 Jordan Reed

A scoping review of the use of artificial intelligence models in OCT analysis and prediction of postoperative outcomes after surgery for idiopathic epiretinal membrane

17.09 Inès Schumacher

Transfer Learning with RETFound for Retinal Capillary Haemangioma Detection

17.12 Robbert Struyven

Deep Learning-Enabled Choroidal Segmentation Identifies AMD Stage-Dependent Choroidal Thinning

17.15 Discussion

17.30 End of Session

Saturday 7th March

- 08.00 - 09.00 Registration, welcome coffee, networking
- 09.00 - 10.00 **Session 3: AI in Maculopathies**
Chairs: Adnan Tufail, Bart Leroy
- 09.00 Gregor Reiter
Predicting and managing atrophy and fibrosis development in AMD using AI
- 09.08 Philippe Valmaggia
Predictive modeling of AMD progression
- 09.16 Anat Loewenstein
AI in home OCT
- 09.24 Roy Schwartz
AI tools to monitor geographic atrophy
- 09.32 Niko Pontikos
AI in IRDs
- 09.40 Discussion
- 10.00 - 10.20 **Keynote: Pearse Keane**
The Future of Retina: From Artificial General Intelligence (AGI) to Artificial Medical Intelligence (AMI)
- 10.20 - 10.50 **Poster Tour**
- 10.50 - 11.20 **Coffee break**
- 11.20 - 12.20 **Session 4: Large Language Models**
Chairs: Martin Zinkernagel, Rodrigo Anguita
- 11.20 Clarisa Sanchez
LLM: Overview and definition

11.28 Ariel Ong

LLM in retinal research: opportunities and limits

11.36 Stanislao Rizzo

LLM for Accurate guidance for retinal detachment surgery

11.44 Rodrigo Anguita

LLM for decision making in macular hole surgery

11.52 Martin Zinkernagel

LLM in clinical workflow

12.00 Discussion

12.20 - 12.45

Industry Session

Chair: Nicole Eter

12.20 Pierre-Jean Pintard

The Retina Renaissance: Artificial Intelligence and the Shift Toward Precision Medicine

abbvie

12.30 Stela Vujosevic

AI powering the next generation of clinical trials

retinai

12.35 Pearse Keane

Accelerating healthcare from the eye

THINC
TOPCOH HEALTHCARE INNOVATION CENTER

12.40 Discussion

12.45 - 13.45

Lunch & networking

13.45 - 14.45

Session 5: Foundations for Responsible AI in Retina

Chairs: Caroline Klaver, Tunde Peto

13.45 Anca del Río

Turning barriers into bridges: advancing innovation in healthcare

13.53 Jeffry Hogg

Data governance considerations for AI enabled retina services

14.01 Arnim Malcherek

AI-supported image generation as a means of data autonomy

14.09 Niklas Lidströmer

Using ambient AI scribes in European clinical settings: evidence, barriers & next step

14.17 Stela Vujosevic

AI for clinical trials in retinal diseases

14.25 Discussion

14.45 - 15.45

Session 6: AI in Vitreoretinal Surgery and Robotics

Chairs: Nicole Eter, Patricia Udaondo

14.45 Robert E. MacLaren

Robot-assisted retinal surgery

14.53 Prof. M. Ali Nasseri

AI-guided surgical planning in retinal disorders

15.01 Ivo Declerck

Robotics in vitreoretinal surgery: AI integration

15.09 Rebekka Peter

AI for intraoperative decision making

- 15.17 Marc de Smet
Future directions of robotics and AI in retinal surgery
- 15.25 Discussion
- 15.45 - 16.00 Coffee break**
- 16.00 - 16.15 Audience consensus survey**
- 16.15 - 17.15 Session 7: AI in Vascular Disease**
Chairs: Reinier Schlingemann, Edoardo Midena
- 16.15 Daniel Ting
Impact of screening and risk prediction of diabetic retinopathy
- 16.23 Adnan Tufail
AI algorithms for mass deployment: Outcomes of head-to-head study for DR detection
- 16.31 Edoardo Midena
AI in diabetic macular edema: the precision medicine approach
- 16.39 Darius Moshfegi
AI in retinopathy of prematurity
- 16.47 Mattia Tomasoni
Employing AI in exploring the retinal vasculature and its relation to systemic disease
- 16.55 Discussion
- 17.15 End of programme
- 17.15 - 18.00 Reception & networking**

Posters

1. David Almeida

Co-Authors: Suvarna Jajjara, Bethany Scott, Mahita Kadmiel

The Zero-Hallucination Protocol: Validating a Retrieval-Augmented Generation (RAG) LLM for Real-time Clinical Trial Protocol Navigation and Safety Compliance

2. Rodrigo Anguita

Co-Authors: Carla Troyas, Neil Shah, Lorenzo Ferro Desideri, Martin Zinkernagel

A LOCAL VOICE AND COMPUTER VISION-BASED RETRIEVAL-AUGMENTED AI ASSISTANT TO SUPPORT INTRAOPERATIVE DECISION-MAKING IN RETINAL SURGERY TRAINING

3. Amash Aqil

Co-Authors: Okonkwor CO, Ong AY, Hogg HDJ

Exploring value drivers for AI implementation in neovascular age-related macular degeneration monitoring

4. Irati Arenzana

Co-Authors: Susana Ruiz Bilbao, Pablo Díaz Aljaro, Francesc Franquesa García, Rafael Muñoz, Sandra Gómez Sánchez, Adria Sánchez -Fortún, Àngels Popuplana Sardà, Antoni Sabala Llopart, Xabier Mugica Iturbe, Idoia Besada Salgado, Unai Ayala Fernandez, Maitane Barrenechea Carrasco

Predictive modeling of cardiovascular risk factors using OCT and Fundus Images with deep learning techniques.

5. Fiammetta Catania

Co-Authors: Thibaut Chapron, Emanuele Crincoli, Youssef Abdel Massih, Alexandra Miere, Ismael Chehaibou, Florence Metge, Sophie Bonnin, Sebastien Bruneau, Eric H Souied, Georges Caputo

Deep Learning for prediction of late recurrence of retinal detachment using preoperative and postoperative ultra-wide field imaging

6. Stefina Dominic

Co-Authors: Jaskaran Singh Bhangu, Chris Stewart, Rhadika Rewal, Ahmad Sam Fattouh, Safa Elhassan, Gwyn Williams

Evaluation of Injection Burden Compared to Discharge Status for Faricimab, Aflibercept (2mg/8mg), and Ranibizumab-Biosimilar using AI-based Clinical Analytics

7. Lorenzo Ferro Desideri

Co-Authors: Enrico Bernardi, Gaurav Bhardwaj, Martin Zinkernagel, Rodrigo Anguita

NO-CODE AUTOMATED MACHINE LEARNING FOR CLASSIFYING VITREOMACULAR INTERFACE DISORDERS FROM OCT IMAGING

8. Clara Grün

Co-Authors: Clara von Campe, Armin Wolf, Christian M. Wertheimer

Non-linear regression in a neural network and explainable artificial intelligence to identify key biomarkers predictive of visual acuity after pars plana vitrectomy for full thickness macular holes.

9. Rahele Kafieh

Co-Authors: Roya Arian, Euan Allen, Max Tyler

HAGAN: A Hybrid Attention GAN That Transforms Home-OCT Scans Into Clinically Reliable Images

10. Denna Sabrina Langhans

Co-Authors: Anna Hillenmayer, Carolin Elhardt, Bjoern Lofi, Armin Wolf, Christian Maximilian Wertheimer

Neural network for natural language processing to support ethical triage of time-critical retinal emergencies in an ophthalmology emergency department

11. Oliver Leingang

Co-Authors: Florentin Huemer, Wolf-Dieter Vogl, Hlynur Skulason, Ariadne Whitby, Emma Foos, Roy Schwartz, Caroline R. Baumal, Ursula Schmidt-Erfurth, Daniela Ferrara

Topographic forecasting of geographic atrophy progression from OCT-derived retinal biomarker maps using a neural ODE framework

12. Arnim Malcherek

Co-Authors: Kaspar Bulke, Marten Denkscherz, Stefan Dietrich, Steven Elliott Engel, Ivan Falchenko, Christina Kihn, Robin Luley, Maximilian Neumann, Lorenz Pietsch, Silvio Stammler, Sunniva Voß, Jensjulian Storp, Nicole Eter, Horst Zisgen

Comparison of different generative AI methods for the creation of fundus images

13. Luis Mendes

Co-Authors: Ines Marques, Catherine Creuzot-Garcher, Leonardo Mastropasqua, Francesco Bandello, Mariacristina Parravano, Conceição Lobo, Sérgio Leal, José Cunha-Vaz

Interpretable AI Models and SHAP Analysis for NPDR Progression: Insights from the CHART Study

14. Andrea Olenik Memmel

Co-Authors: Garcia Risco Rocio, Zapata Vitori Miguel Angel

Effectiveness of a Hybrid Artificial Intelligence–Human Teleophthalmology Screening System Using Portable Fundus Imaging in Underserved Rural Populations

15. Ariel Ong

Co-Authors: Robbert Struyven, David Merle, Helia Ashourizadeh, Kelvin Milton Mendez, Afonso Lima Cabrita, Demetrios G Vavvas, Ivana K Kim, Joan W Miller, Zhichao Wu, John B Miller, Pearse A Keane, Deeba Husain, Ines Lains

Association of reticular pseudodrusen burden and dark adaptation in age-related macular degeneration

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Co-Authors: Abbas Haider, Hui Wang, Ruth Hogg, David Wright, Richard Gault

Why bigger is not always better: How choosing the right data and computation can enable effective AI

17. Andreas Pollreisz

Co-Authors: Ronald Fecso, Jose Morano, Paul Widmann-Sedlnitzky, Dorota Himel, René Donner, Hrvoje Bogunovic

Evaluation of Multimodal Large Language Models for Visual Understanding of Retinal Optical Coherence Tomography Scans

18. Sofia Ramirez Astruga

Co-Authors: Pablo Redruello Guerrero, Nadia Galindo Cabello, Laura Molinero-Sicilia, Veikis Carolina Ruiz Peralta, Beatriz Aguilera Reyes, Ricardo Usategui Martín, Jorge Mateo Sotos, Salvador Pastor Idoate

Prediction of Functional Outcomes in Retinal Detachment Using Machine Learning and Deep Learning Models

19. Jordan Reed

Co-Authors: William Purcell (joint first author and co-presenter), Teresa Sandinha, Mohaimen Al-Zubaidy, Rui Santos, Gábor Márk Somfai, Chiara M. Eandi, Theodore Stappler, Armin Wolf, David Steel

A scoping review of the use of artificial intelligence models in OCT analysis and prediction of postoperative outcomes after surgery for idiopathic epiretinal membrane

20. Inès Schumacher

Co-Authors: Carla Troyas, Inès Schumacher, Michael Yu, Rodrigo Anguita

Transfer Learning with RETFound for Retinal Capillary Haemangioma Detection

21. Agnieszka Stankiewicz

Co-Authors: Hannah Tsaberiaba, Mohaimen Al-Zubaidy, Boguslaw Obara, Rebecca Pope, Richard Pohler, Maged Habib, David Steel

Quantitative Prediction of Visual Acuity Outcomes in Diabetic Macular Oedema Using Multimodal Deep Learning

22. Robbert Struyven

Co-Authors: Justin Engelmann, David Merle, Ariel Yuhan Ong, Afonso Lima Cabrita, Helia Ashourizadeh, Jooyoung Chang, Lilly Krupp, Katrina Schneider, Ally Wang, Ivana K. Kim, Elizabeth J. Rossin, Demetrios Vavvas, Tobias Elze, Joan W. Miller, Pearse A. Keane, Deeba Husain, John B Miller, Ines Lains

Deep Learning-Enabled Choroidal Segmentation Identifies AMD Stage-Dependent Choroidal Thinning

23. Christian Taylor

Co-Authors: David Steel, Anya Hurlbert, Rahele Kafieh, Dexter Canoy, Jaume Bacardit

Design of deep learning ensembles for explainable age predictions from retinal OCT scans

24. Hanna Tsaberiaba

Co-Authors: Agnieszka Stankiewicz, Mohaimen Al-Zubaidy, Thomas McNally, Marco Rovati, Matthew Anderson, Boguslaw Obara, Rebecca Pope, Richard Pohler, Maged Habib, David Steel

Creating a Validated OCT Fluid Segmentation Gold Standard to Support AI Development in DMO

25. Lorena Ulla

Co-Authors: Monica Sequenza, Daniele Bussi, Kristen M. Meiburger, Enrico Borrelli, Massimo Salvi, Paola Marolo, Claudio Foti, Filippo Molinari, Michele Reibaldi

Generative Adversarial Networks Model for Synthetic Optical Coherence Tomography in age macular degeneration

26. Karin van Garderen

Co-Authors: Bart Liefers, Sjoerd J. Driessen, Jeroen P. Vermeulen, Ansgar Beuse, Carsten Grohmann, Pieter W. Bonnemaier, Alberta Thiadens, Caroline C.W. Klaver

EyeNED Layer Segmentation: a vendor-neutral, open-source AI-driven toolbox for OCT retinal layer analysis

