



29th **EVER** **CONGRESS**

15-17 October 2026
Florence

PRELIMINARY PROGRAMME



oic
group

About the programme book

Sessions

- BM** Business Meeting
- CIS** Company Interested Symposium
- C** Course
- JS** Joint Session
- KN** Keynote Lecture
- YI** Young Investigators Session
- POS** Poster Session
- PS** Plenary Session
- RF** Rapid Fire Session
- SIS** Special Interest Symposium
- FR** Free Paper Session

Symbol

rf = Rapid Fire presentation

Scientific sections

- ACB = Anatomy / Cell Biology
- COS = Cornea / Ocular Surface
- EOVS = Electrophysiology, Physiological Optics, Vision Sciences
- G = Glaucoma
- IM = Immunology / Microbiology
- LC = Lens and Cataract
- MBGE = Molecular Biology / Genetics / Epidemiology
- NSPH = Neuro-ophthalmology/Strabismology / Paediatric Ophthalmology / History of Ophthalmology
- PBP = Physiology / Biochemistry / Pharmacology
- PO = Pathology / Oncology
- RV = Retina / Vitreous



08:30-08:45 | Room 2

PS Opening Ceremony

08:45-09:30 | Room 2

KN European Ophthalmic Heritage Lecture

Visual acuity (VA) is the most frequently obtained psychophysical threshold and included as endpoint in clinical studies. Initially, I will review the signal-detection principles, which underpin all sensory testing, supplying a rationale for VA test design.

While acuity charts deservedly remain the most common tool, semi-automatic computer-based testing presents advantages: It allows more objective testing, eliminates laborious manual scoring, automates data transfer to management systems, allows deep customization, novel stimuli, minimized learning, optimized patient motivation, and confidence ranges.

Such advantages offers the free "Freiburg Acuity (and Contrast) Test" (FrACT, <https://michaelbach.de/fract/>). Limitations will be discussed at the high-VA end (caused by pixel size), and in the (ultra) low-VA region, which is "off chart" for ETDRS charts even at 1-meter observation distance.

We found in two separate studies that FrACT can reproducibly assess VA in the range heretofore categorized as Counting Fingers (CF) and Hand Movement (HM). The results suggest values of 1.9 LogMAR for FC and 2.3 LogMAR for HM. Test-retest reproducibility will be discussed as a compromise between testing time and precision..

08:45 Introduction
Sven Heinrich (Germany)



08:50 From normal vision to low vision to "Off Chart"
Michael Bach (Germany)

09:30-10:45 | Room 2

C ACB 35 - Vessel tortuosity computation revisited: what is appropriate – and what is not?

Vessel tortuosity has been studied for over 50 years and remains a key descriptor of vascular architecture and structural organization. Alterations in vascular geometry occur across ocular and systemic diseases, underscoring the need for consistent morphometric definitions. However, multiple competing definitions remain in use, often yielding different results when vessel length, scale, or sampling resolution differ, thereby limiting structural comparability.

This course provides an overview of tortuosity computation, from classical geometric concepts to modern scale-independent approaches. Through theoretical insight and practical examples, participants will learn when comparisons are meaningful and how to avoid methodological pitfalls in quantitative vascular morphology.

Organizer: **Andres Bribiesca-Sanchez** (Mexico)

Co-organizer: **Franziska G. Rauscher** (Germany)

09:30 Slope chain code-based vessel tortuosity – Introduction and advantages
Ulf-Dietrich Braumann (Germany)

09:51 From clinical images to discrete curves: methodological pitfalls in tortuosity computation
Zian Fanti-Gutierrez (Mexico)

10:12 A scale-independent measure of tortuosity that is robust against variation of vessel-length
Johannes Dietter (Germany)

10:33 Discussion

09:30-10:45 | Room B.1**C MBGE 44 - Genetic testing in inherited eye diseases**

This course provides a practical overview of genetic testing in inherited eye diseases, from sequencing to variant interpretation and functional validation. It introduces modern sequencing methods and strategies for prioritizing disease-causing variants, followed by methods for variant classification and annotation, including application of ACMG guidelines. The course also addresses strategies for resolving difficult-to-interpret variants using multi-omics data and disease models to establish pathogenicity. Together, these topics highlight current tools and workflows that support accurate molecular diagnosis, improve variant interpretation, and advance precision care for patients with inherited eye diseases.

Organizer: **Joni Turunen** (Finland)

Co-organizer: **Elfride De Baere** (Belgium)

- 09:30 Modern sequencing methods and variant prioritization in inherited eye diseases
Mathieu Quinodoz (Switzerland)
- 09:51 Variant classification and annotation in inherited eye diseases
Pauliina Repo (Finland)
- 10:12 Decoding difficult-to-interpret variants in rare eye diseases using multi-omics and disease models
Elfride De Baere (Belgium)
- 10:33 Discussion

09:30-10:45 | Room B.2**SIS RV 60 - Post-vitrectomy complications: how to deal?**

Vitrectomy has become a relative safe procedure, although serious complications may occur. Ocular hypertension has an incidence 11,6-50%. Ocular hypotony is expected in the 1st week with gas tamponade, later when silicone is used. Ocular hypotony is common after sutureless vitrectomy with an incidence 10-16% on the 1st day. Cystoid macular oedema (CMO) after vitrectomy is a significant complication with incidence 5,5-36%. Endophthalmitis following vitrectomy is ranging from 0,02-0,05%, occurs within 5 days post-operation. Proliferative vitreoretinopathy (PVR) develops within 4-12 weeks after the initial retinal re-attachment surgery and develops in 5-10% of cases.

The purpose of the SIS is to highlight the importance of prevention and early recognition of serious complications such as ocular hypertension, ocular hypotony, endophthalmitis, CMO, PVR as well as management tips

Organizer: **Tina Xirou** (Greece)

Co-organizer: **Evgenia Kontou** (Greece)

- 09:30 Post-vitrectomy endophthalmitis
Tina Xirou (Greece)
- 09:43 Ocular hypertension following vitrectomy.
Evgenia Kontou (Greece)
- 09:56 Ocular hypotony in vitrectomized eyes.
Ilias Gkizis (Greece)
- 10:09 Cystoid macular oedema after vitrectomy
Christina Garnavou-Xirou (United Kingdom)
- 10:22 Proliferative vitreoretinopathy (PVR) following vitrectomy
Stavros Velissaris (Greece)
- 10:35 Discussion



09:30-10:45 | Hall 3.A

RF Rapid Fire 1

09:30-10:45 | Hall 3.1

RF Rapid Fire 2

**THURSDAY
15 OCTOBER 2026**

09:30-10:45 | Hall 3.2**EOVS 28 - Clinical indications for visual electrophysiology**

The course will describe common clinical indications for electrophysiological investigations, to illustrate the choice and value of complementary tests and how they can contribute to diagnosis in patients who present with symptoms and signs such as night blindness, visual acuity loss, photophobia and nystagmus. The session will highlight how electrophysiology can localise dysfunction with the retina and visual pathways and help differentiate between disorders that may have similar or overlapping symptoms and signs. The session will also describe the value of objective testing in children, using modified protocols suitable for a paediatric population.

Organizer: **Anthony Robson** (United Kingdom)

Co-organizer: **Omar Mahroo** (United Kingdom)

09:30 Night blindness 1. Congenital stationary night blindness
Isabelle Audo (France)

09:43 Night blindness 2. Progressive retinal disorders
Omar Mahroo (United Kingdom)

09:56 Photophobia
Magella Neveu (United Kingdom)

10:09 Visual acuity loss
Anthony Robson (United Kingdom)

10:22 Special considerations for children
Dorothy Thompson (United Kingdom)

10:35 Discussion

09:30-10:45 | Room 4.1**NSPH 20 - Hot topics in neuro-ophthalmology**

The course will describe common clinical indications for electrophysiological investigations, to illustrate the choice and value of complementary tests and how they can contribute to diagnosis in patients who present with symptoms and signs such as night blindness, visual acuity loss, photophobia and nystagmus. The session will highlight how electrophysiology can localise dysfunction with the retina and visual pathways and help differentiate between disorders that may have similar or overlapping symptoms and signs. The session will also describe the value of objective testing in children, using modified protocols suitable for a paediatric population.

Organizer: **Raoul Khanna** (France)

Co-organizer: **Patrick Yu-Wai-Man** (United Kingdom)

09:30 Optic neuritis: the expandum spectrum
Raoul Khanna (France)

09:46 Idiopathic intracranial hypertension in 2026: evolving management strategies
Maelle Coutel-Darrieu

10:02 IGF-1R inhibition in thyroid eye disease: hype, hope, or here to stay?
Arnaud Martel (France)

10:18 Pseudopapilledema: the good, the bad, and the ugly
Vasily Smirnov (France)

10:34 Discussion

10:45-11:15 | Coffee break



11:20-12:05 | Room 2

KN EVER Acta Lecture

Endothelial keratoplasty has dramatically revolutionized corneal transplantation in the last 2 decades. Posterior lamellar techniques show less immune reactions as well as a faster and better visual recovery. Recent and continuing improvements relate to (a) novel options for artificial endothelial keratoplasty in higher-risk eyes, (b) better prevention of complications such as immune reactions and CME, (c) optimized use of donor tissue e.g. in DSO and personalized DMEK as well as (d) optimized insertion devices. These novel developments will be discussed together with ideas for future experimental and clinical developments.

11:20 Introduction
Kai Kaarniranta (*Finland*)

11:25 Endothelial keratoplasty: an ongoing (r)evolution
Claus Cursiefen (*Germany*)



THURSDAY
15 OCTOBER 2026

12:05-13:05 | Room 2 - Room 4.1

POS Poster Session 1

13:10-14:10 | Room 2 - Room 4.1

CIS Industry Sponsored Lunch Symposium

14:20-15:35 | Room 2

YI Young Investigators Session 1

14:20-15:35 | Room B.1

SIS MBGE 19 - From genes to treatment in inherited retinal disorders

Inherited retinal disorders (IRDs) represent a genetically and clinically heterogeneous group of diseases leading to progressive visual impairment and blindness. Caused by pathogenic variants in numerous genes, IRDs show wide variability in age of onset, disease progression, and retinal phenotype, making diagnosis and prognosis challenging. This Special Interest Session (SIS) will address the importance of genotype-phenotype correlations in IRDs and their role in accurate disease classification, patient counseling, and preparation for therapeutic interventions. The session will highlight how genetic testing combined with detailed clinical phenotyping can guide patient stratification and therapeutic decision-making. In addition, current and emerging treatment strategies will be discussed, and first clinical outcomes from ongoing and completed trials will be presented.

Organizer: **Christina Zeitz** (France)Co-organizer: **Baptiste Wilmet** (France)

- 14:20 Importance of genotype-phenotype correlations in IRDs
Lorenzo Bianco
- 14:33 RPGR-associated retinal degenerations and approaches to treat
John Neidhardt
- 14:46 Antisense oligonucleotides for inherited retinal diseases
Rob Collin
- 14:59 Current treatment strategies for human pluripotent stem cells for inherited retinal diseases
Christelle Monville (France)
- 15:12 Update of treatment of patients with IRDs in France
Isabelle Audo (France)
- 15:25 Discussion



14:20-15:35 | Room B.2

C COS 52 - Standardizing tear fluid research: from consensus to clinical translation

The growing interest in tear fluid biomarkers has highlighted the urgent need for international harmonization in terminology, methodology and reporting standards. Variability in pre-analytical procedures, analytical platforms and data interpretation currently limits reproducibility and clinical translation. This course will present coordinated efforts to standardize the field, including consensus recommendations on tear fluid terminology, Delphi-based international reporting guidelines, practical frameworks for tear biobanking, and methodological approaches to biomarker analysis. Initiatives led by the Tear Research Network will be discussed as a model for collaborative science. By promoting shared standards and multicenter alignment, this course aims to strengthen research quality and accelerate the integration of tear biomarkers into clinical practice.

Organizer: **Marlies Gijs** (*The Netherlands*)

Co-organizer: **Piera Versura** (*Italy*)

- 14:20 Consensus recommendations on tear fluid terminology
Clemence Bonnet (*United States*)
- 14:33 International reporting guidelines for tear fluid research: a Delphi consensus
Jente Schmeetz (*The Netherlands*)
- 14:46 A practical starting guide to tear fluid biobanking
Magella Neveu (*United Kingdom*)
- 14:59 Methodological approaches of tear fluid biomarkers
Nienke Van De Sande (*The Netherlands*)
- 15:12 Standardizing and harmonizing tear fluid research: efforts from the Tear Research Network
Marlies Gijs (*The Netherlands*)
- 15:25 Discussion

14:20-15:35 | Hall 3.A

RF Rapid Fire3

14:20-15:35 | Hall 3.1

FP Free Paper Session 1

14:20-15:35 | Hall 3.2**C EOVS 57 - Basic principles of state-of-the-art ophthalmic instrumentation**

This course is aimed at providing an overview of the basic optical principles and machine learning applications of state-of-the-art retinal-imaging systems, with a special emphasis on optical coherence tomography (OCT). The course will include a discussion of additional contrast mechanisms, future trends and cutting-edge developments, along with how such imaging can even serve as a window into brain mechanisms. The goal is to illuminate for the clinician and scientist the underlying optical concepts of various devices and technological variations, even when not familiar with the particular technology employed within the instrument, and to demonstrate its potential with applications beyond those of retinal disease diagnosis and follow-up.

Organizer: **Kristina Irsch** (*France*)

Co-organizer: **Miguel Castelo-Branco** (*Portugal*)

- 14:20 Optical coherence tomography - Basic optical principles
Kristina Irsch (*France*)
- 14:36 Optical coherence tomography - Additional contrast mechanisms, future trends, and cutting-edge technological developments
Kristina Irsch (*France*)
- 14:52 Optical coherence tomography - Machine learning
Rui Bernardes (*Portugal*)
- 15:08 Retinal imaging - A window into brain mechanisms
Miguel Castelo-Branco (*Portugal*)
- 15:24 Discussion

14:20-15:35 | Room 4.1**JS PBP 22 - Glial-Mediated Inflammatory Responses in Retinal Neurodegeneration**

Retinal neurodegenerative diseases, including glaucoma and optic neuropathies, involve complex mechanisms beyond primary neuronal loss. Interactions between retinal ganglion cells and glial cells—particularly Müller glia and microglia—shape neuroinflammation, metabolic imbalance and tissue remodeling. This symposium integrates experimental and translational perspectives to examine how glial activation, immune signaling and metabolic stress drive retinal vulnerability and optic nerve damage. It will explore the dual neuroprotective and neurotoxic roles of glia, their crosstalk with neurons, chronic inflammation, and the impact of biomechanical stress along the retina–optic nerve axis to identify biomarkers and therapeutic targets.

Organizer: **María Norte Muñoz** (*Spain*)

Co-organizer: **Xandra Pereiro** (*Spain*)

- 14:20 Müller Glia–Retinal ganglion cell communication via extracellular vesicles in glaucoma
Xandra Pereiro (*Spain*)
- 14:36 When mechanics matter: how müller glia sense and respond to their environment
Laura Prieto López
- 14:52 Lipid signalling in inflammation
María José Ruiz Pastor (*Spain*)
- 15:08 New frontiers in cellular therapy for retinal regeneration
María Norte Muñoz (*Spain*)
- 15:24 Discussion



15:40-16:25 | Room 2

KN De Laey Ever Keynote Lecture

Glaucoma is a leading cause of irreversible blindness, with even more people experiencing visual impairment and consequently reduced quality of life. Late detection, due to its insidious and asymptomatic course, non-adherence to treatment, variable rates of progression among patients, and progression despite apparently controlled intraocular pressure, all contribute to visual impairment. Improving glaucoma management requires timely detection and treatment, with a shift from eye drop-based care to a personalised approach stratified by risk of progression. This includes integrating selective laser trabeculoplasty as first-line therapy, utilising minimally invasive glaucoma surgery for earlier intervention, and introducing sustained-release drug delivery systems, all of which enhance adherence. In the future, unravelling pathogenetic mechanisms using glaucomics could enable the identification of novel biomarkers and drug targets for glaucoma.

- 15:40 Introduction
Miriam Kolko (Denmark)
- 15:45 How to improve glaucoma management? Challenges and opportunities
Barbara Cvenkel (Slovenia)



16:25-16:55 | Coffee break

16:55-18:10 | Room 2

YI Young Investigators Session 2

16:55-18:10 | Room B.1

SIS MBGE 22 - MSCA Doctoral Network MyoTreat: Myopia - from genes and environment to cellular responses and treatment

Vision is regulated by biochemical pathways that control eye growth: an inhibitory pathway activated when images focus in front of the retina, and a stimulatory pathway when images focus behind it. Myopia causes distant objects to appear blurry, and current treatments offer limited benefits. Funded by the Marie Skłodowska-Curie Actions programme, the MyoTreat project brings together experts from six European countries to train 12 doctoral candidates. The consortium investigates how genetic variants interact with lifestyle factors influencing myopia, with a strong focus on the role of the choroid in eye-growth regulation. Using human and animal models, the project aims to identify new drug targets, develop early biomarkers, and advance innovative therapies to regulate eye growth.

Organizer: **Christina Zeitz** (France)
Co-organizer: **Marita Feldkaemper** (Germany)

- 16:55 The role of primary metabolic processes and energy demand during myopia and hyperopia development
Marita Feldkaemper (Germany)
- 17:08 Short time lens wear in mature chicken: choroidal response and molecular analysis
Falk Schrödl (Austria)
- 17:21 Inherited retinal disorders as a tool to better understand myopia
Christina Zeitz (France)
- 17:34 Polymorphisms in cone function genes: a step toward understanding common refractive errors?
Rigmor C. Baraas (Norway)
- 17:47 Insights from studying polygenic scores for refractive error
Jeremy Guggenheim (United Kingdom)
- 18:00 Discussion

16:55-18:10 | Room B.2**SIS** **COS 31 - Corneal infections**

This SIS will cover aspects of corneal infection pathologies, diagnosis and treatment:

Five renowned corneal specialists from five European countries will share their expertise with a broad spectrum of infectious keratitis setting:

Contact-lens associated keratitis, AI-based tools of diagnosis finding, infections related to keratoplasties, an update on acanthamoeba keratitis as well as therapeutic approaches like antibacterial crosslinking.

Organizer: **Thomas Fuchsluger** (Germany)

Co-organizer: **Rimvydas Asoklis** (Lithuania)

- 16:55 Corneal infections
Rimvydas Asoklis (Lithuania)
- 17:08 Hot, warm and cold keratoplasty in infectious keratitis
Harminder S. Dua (United Kingdom)
- 17:21 Antibacterial crosslinking
Claus Cursiefen (Germany)
- 17:34 AI assisted diagnosis of acanthamoeba keratitis
Giulio Ferrari (Italy)
- 17:47 Current studies on Acanthamoeba keratitis and treatment
Thomas Fuchsluger (Germany)
- 18:00 Discussion

16:55-18:10 | Hall 3.A**RF** **Rapid Fire4****16:55-18:10 | Hall 3.1****RF** **Rapid Fire5**



16:55-18:10 | Hall 3.2

JS EOVS 11 - ISCEV methods, extended protocols and future techniques

This ISCEV/EVER course will describe the electrophysiological and psychophysical methods endorsed by the International Society for Clinical Electrophysiological of Vision (ISCEV) with the focus on the most recently developed tests, including typical clinical and research applications. The course will additionally highlight new methods of recording and analyses that are likely to gain more widespread acceptance, either for screening, diagnostic or deep phenotyping purposes

Organizer: **Anthony Robson** (*United Kingdom*)

Co-organizer: **Omar Mahroo** (*United Kingdom*)

- 16:55 Introduction to ISCEV electrophysiological methods
Ruth Hamilton (*United Kingdom*)
- 17:11 A new extended ERG protocol: photoreceptor-directed ERGs
Jan Kremers (*Germany*)
- 17:27 Objective VEP estimation of visual acuity
Dorothy Thompson (*United Kingdom*)
- 17:43 Potential of the potentials: new and future methods
Omar Mahroo (*United Kingdom*)
- 17:59 Discussion

16:55-18:10 | Room 4.1

SIS EOVS 24 - Myopia innovations: 2026

This session will present the latest innovations and evidence-based strategies in myopia management as of 2026, with a strong focus on clinical applicability. International experts will review ongoing clinical trials in myopia control and provide an update on emerging pharmacological approaches, including the role of 7-methylxanthine. Novel optical interventions, such as defocus-based spectacle designs for myopia control, will be discussed alongside current data on their effectiveness. Special attention will be given to the safety of repeated low-level red light (RLRL) therapy, addressing both benefits and potential risks. The session will conclude with a practical overview of implementing structured, evidence-based clinical pathways for myopic children, highlighting real-world experience from the Moorfields Dubai myopia pathway.

Organizer: **Andrzej Grzybowski** (*Poland*)

Co-organizer: **Carla Rita Dos Santos Costa Lança** (*United Arab Emirates*)

- 16:55 Ongoing clinical studies on myopia control
Carla Rita Dos Santos Costa Lança (*United Arab Emirates*)
- 17:08 7-methylxanthine in myopia control: Update 2026
Klaus Trier (*Denmark*)
- 17:21 Myofix defocus spectacles for myopia control
Rafael Iribarren (*Argentina*)
- 17:34 Safety of low-intensity red light therapy
Andrzej Grzybowski (*Poland*)
- 17:47 Implementing an evidence based pathway for myopic children: The Moorfields Dubai pathway for myopic children
Imran Jawaid (*United Arab Emirates*)
- 18:00 Discussion

08:30-09:15 | Room 2

KN Soubrane EVER Keynote Lecture

- 08:30 Introduction
Joni Turunen (Finland)
- 08:35 TBD
Janey Wiggs (United States)

09:20-10:35 | Room 2

YI Young Investigators Session 3

09:20-10:35 | Room B.1

SIS MBGE 41 - Toward precision glaucoma screening: the role of genetics and AI

The session explores how genomics and artificial intelligence (AI) can shift glaucoma screening from reactive detection toward precision prevention. Tusa presents Finnish biobank data showing that polygenic risk scores (PRS) stratify lifetime glaucoma risk and predict treatment needs. Wiggs demonstrates that recall by PRS reveals higher disease prevalence and many previously undiagnosed cases. Reimann addresses the "reality gap" between strong AI benchmark performance and real-world clinical utility, emphasizing calibration, uncertainty estimation, robust OCT representations, and longitudinal modeling. Hemelings introduces AI-derived endophenotypes that convert retinal imaging into estimates of progression for genetic discovery and precision prognosis. Together, these approaches aim to enable earlier detection, improved risk stratification, and personalized glaucoma care.

Organizer: **Joni Turunen** (Finland)
Co-organizer: **Marcel Reimann** (Denmark)

- 09:20 Polygenic scores for risk stratification and prognosis of glaucoma in the Finnish population
Eemeli Tusa (Finland)
- 09:36 Recall by polygenic risk score in two biobanks supports a genomic approach for glaucoma detection
Janey L. Wiggs (United States)
- 09:52 The reality gap in AI: how to ensure AI tools deliver actual clinical utility in glaucoma screening
Marcel Reimann (Denmark)
- 10:08 AI-Derived endophenotypes for glaucoma progression: bridging the gap between retinal imaging and genetics
Ruben Hemelings (Singapore)
- 10:24 Discussion



09:20-10:35 | Room B.2

SIS COS 40 - Omics in corneal health and disease: from molecular insights to clinical impact

The healthy cornea is the non-vascular, transparent “windshield” of the eye. Pathologic influences, such as infections, hereditary diseases, transplant rejection, or trauma can lead to corneal blindness due to neovascularization, scarring, or disturbed wound healing. To address these challenges, the highly dynamic field of transcriptomic and proteomic analysis has reached the anterior part of the eye. This symposium will explore how (multi-) omics transform our understanding of corneal biology in health and disease. Experts will present cutting edge insights into distinct corneal cell types, disease and wound healing mechanisms in mice and men including spatial proteomics, single cell transcriptomics as well multiple disease-comparing analysis. The presenters will highlight how different omic-approaches will advance diagnostics, prognostics, and therapies for corneal diseases.

Organizer: **Karina Hadrian** (Germany)

Co-organizer: **Felix Bock** (Germany)

- 09:20 Local immune and lymph-vascular profiling of different diseases leading to high-risk corneal transplantation condition
Suman Mallanna (Germany)
- 09:41 The Aey80 mutation in the Pax 6 gene causes an age-dependent aniridia phenotype
Karina Hadrian (Germany)
- 10:02 Layer-specific proteomic profiling of the human cornea reveals insights into structure and biological function
Hauke Schadwinkel (Germany)
- 10:23 Discussion

09:20-10:35 | Hall 3.A

RF Rapid Fire 6

09:20-10:35 | Hall 3.1

RF Rapid Fire 7

09:20-10:35 | Hall 3.2

SIS LC 30 - Pharmacological approaches to cataracts

This session will focus on emerging pharmacological strategies aimed at preventing, delaying, or modifying cataract formation, addressing a major unmet need beyond surgical treatment. International experts will present investigative anti-cataract therapies, highlighting novel molecular targets and translational research approaches. The potential role of caffeine in cataract prevention will be reviewed alongside mechanistic insights into lens protection. Speakers will explore the function of alpha-crystallins in suppressing inflammation-induced cataract and discuss small-molecule chaperones designed to inhibit gamma-crystallin aggregation in age-related cataracts. The session will also examine calcium signalling in the human lens epithelium and its relevance to lens homeostasis and cataractogenesis.

Organizer: **Andrzej Grzybowski** (Poland)
Co-organizer: **Mayank Nanavaty** (United Kingdom)

- 09:20 Novel anti-cataract therapies: investigative approaches
Barbara Pierscionek (United Kingdom)
- 09:33 Prevention of cataract with caffeine
Per Soderberg (Sweden)
- 09:46 The role of alpha-crystallin in suppressing inflammation-induced cataract
David Li (China)
- 09:59 Small molecule chaperones for inhibition of gamma crystallin aggregation in age-related cataracts
Vincent Monnier (United States)
- 10:12 Calcium signalling in the human lens epithelium
Sofija Andjelic (Slovenia)
- 10:25 Discussion

09:20-10:35 | Room 4.1

JS IM 21 - EUSOI – EVER Joint Session: international collaborations for research in ocular inflammation

Ocular inflammation represents a major cause of visual morbidity worldwide and encompasses a heterogeneous group of diseases requiring multidisciplinary expertise and coordinated research efforts. In recent years, international collaborative networks have emerged as powerful platforms to advance understanding, harmonize methodologies, develop consensus guidelines, and accelerate innovation in both clinical and translational research.

The symposium will explore practical strategies for coordinating multinational registries and data-sharing platforms, generating global scientific consensus, and designing robust multicenter clinical trials. In addition, it will address the transformative potential of artificial intelligence and global digital health infrastructures in reshaping research and patient care.

Organizer: **Ester Carreño Salas** (Spain)
Co-organizer: **Claudia Fabiani** (Italy)

- 09:20 Coordinating a big network: the AIDA network
Claudia Fabiani (Italy)
- 09:33 The experience of the Tear Research Network (TRN)
Marlies Gijs (The Netherlands)
- 09:46 The role of the immune system in dry eye disease pathophysiology: a TFOS DEWS III perspective
Piera Versura (Italy)
- 09:59 Special considerations to design multicentric clinical trials in ocular inflammation
Laura Steeples (United Kingdom)
- 10:12 Thinking globally about AI transformation of healthcare
Alastair Denniston (United Kingdom)
- 10:25 Discussion



10:35-11:05 | Coffee break

11:10-11:55 | Room 2

KN Special Recognition Lecture

The treatment of corneal disease is undergoing a true seismic shift. Treatments which were focused on whole tissue replacement (full-thickness penetrating keratoplasty) are being replaced with cell-based therapies of the epithelium, endothelium, and expanded stem cells. Similarly, topical therapies that provide general tissue protection through lubrication and non-specific suppression of inflammation (e.g. corticosteroids) are being replaced by biologics and single growth factors. And more than ever before, the field is understanding the central role of corneal nerves in regulating epithelial, immune, vascular, and endothelial responses in the cornea. This talk will provide an overview of some of these important trends, and focus on translational investigations on managing chronic surface disorders, corneal angiogenesis, pain and inflammation and endothelial dysfunction.

11:10 Introduction
Thomas Fuchsluger (Germany)

11:15 Where is Treatment of Corneal Diseases Heading?
Reza Dana (United States)



11:55-12:55 | Room 2 - Room 4.1

POS Poster Session 2

13:05-14:05 | Room 2 - Room 4.1

CIS Industry Sponsored Lunch Symposium

14:15-15:30 | Room 2

YI Young Investigators Session 4

14:15-15:30 | Room B.1**C****G 38 - Different aspects and approaches to non-adherence**

Non-adherence is a major problem in the treatment of chronic, often asymptomatic diseases such as glaucoma. If not detected, it can lead to frequent changes in medication and more rapid progression of visual field loss. There are several reasons for this. In this special interest symposium, we will discuss how to detect and identify reasons for non-adherence in glaucoma, as well as offer options to address them to improve intraocular pressure control and the quality of life of our patients with the particular technology employed within the instrument, and to demonstrate its potential with applications beyond those of retinal disease diagnosis and follow-up.

Organizer: **Barbara Cvenkel** (Slovenia)Co-organizer: **Karin Öyo-Szerenyi** (Switzerland)

- 14:15 iAdherence – the main challenge in glaucoma management
Karin Öyo-Szerenyi (Switzerland)
- 14:36 Adverse effects of preserved topical glaucoma medication on the ocular surface
Miriam Kolko (Denmark)
- 14:57 How can we help patients to reduce the burden of adherence
Barbara Cvenkel (Slovenia)
- 15:18 Discussion

14:15-15:30 | Room B.2**SIS****COS 51 - Stage-based management of keratoconus beyond contact lenses – an update**

This special interest symposium aims to provide a comprehensive overview of modern approaches to the management of keratoconus. Covering a wide range of therapeutic options, expert speakers will share their insights, offering practical tips and strategies for various treatment modalities. Additionally, the symposium will present a summary of the latest guidelines, ensuring participants are updated on the most current standards of care for keratoconus management.

Organizer: **Zisis Gkatzioufas** (Switzerland)Co-organizer: **Mayank Nanavaty** (United Kingdom)

- 14:15 Novel anti-cataract therapies: investigative approaches
Eszter Szalai (Hungary)
- 14:31 Surface ablation procedures with or without CXL for visual improvement in keratoconus
Miguel Rechichi (Italy)
- 14:47 Femtosecond laser-assisted CAIRS for visual rehabilitation in keratoconus
Zisis Gkatzioufas (Switzerland)
- 15:03 Modern corneal transplantation in keratoconus
Nora Szentmary (Germany)
- 15:19 Discussion

14:15-15:30 | Hall 3.A**RF****Rapid Fire 8**



14:15-15:30 | Hall 3.1

RF Rapid Fire 9

14:15-15:30 | Hall 3.2

FP Free Paper Session 2

14:15-15:30 | Room 4.1

JS RV 13 - Challenges in artificial intelligence in 2026

This session will explore the key scientific, clinical, and ethical challenges facing artificial intelligence in ophthalmology. Experts will discuss how AI is transforming data-driven eye care, while highlighting current limitations and future directions. Topics include the role of large clinical registries and AI applications in uveitis and ocular trauma, the use of AutoML models to accelerate and democratize ophthalmic research, and the emergence of foundation models as a new paradigm in ophthalmology. Particular attention will be given to bias in agentic clinical AI, examining its impact on data quality, clinical decision-making, and patient outcomes. The session will conclude with an overview of AI approaches in neuro-ophthalmology, focusing on emerging trends, practical challenges, and common pitfalls.

Organizer: **Andrzej Grzybowski** (Poland)

Co-organizer: **Miguel Castelo-Branco** (Portugal)

- 14:15 Utility of registries and Application of AI in uveitis and ocular trauma
Rupesh Agrawal (Singapore)
- 14:28 Auto ML models in ophthalmology
Ceren Durmaz (Türkiye)
- 14:41 Foundation models in ophthalmology
Andrzej Grzybowski (Poland)
- 14:54 Bias in agentic clinical AI: data, clinician, and patient impact
Bin Sheng (China)
- 15:07 AI approaches in neuroophthalmology: trends and pitfalls
Miguel Castelo-Branco (Portugal)
- 15:20 Discussion

15:35-16:15 | Room 2

KN Missoten EVER Keynote Lecture

- 15:35 Introduction
Ester Carreno Salas (Spain)
- 15:40 Unlocking medical AI in the real world?
Allistair Denniston (United Kingdom)

16:15-16:45 | Coffee break - Exhibition Area**16:45-18:00 | Room 2****SIS****ACB 21 - Advances in retinal neovascularization and fibrosis: mechanisms, biomarkers, and emerging therapeutic strategies**

Session brings together advances in the understanding/prevention of retinal neovascularization and fibrosis, two central drivers of vision loss in several blinding vitreoretinal eye diseases. Presentations will address the cellular and molecular mechanisms underlying fibrovascular heterogeneity and immune reprogramming in PDR, offering new insights into disease progression. Proteomics-based approaches will be discussed, with a focus on identifying clinically relevant biomarkers that may guide earlier diagnosis/targeted intervention. Key regulators of retinal fibrosis will be examined to highlight emerging therapeutic targets and pathways with translational potential. Session will conclude with an outlook on future directions in fibrosis prevention, including the development of long-acting anti-fibrotic drug delivery systems aimed at improving treatment durability and patient outcomes.

Organizer: **Sirpa Loukovaara** (Finland)Co-organizer: **Anu Kauppinen** (Finland)16:45 Mechanisms of fibrovascular heterogeneity and immune reprogramming in proliferative diabetic retinopathy
Kaisa Lehti (Norway)17:01 Proteomics and fibrotic posterior eye diseases – are biomarkers on the horizon
Markku Varjosalo (Finland)17:17 Key regulators of retinal fibrosis
Goran Petrovski (Norway)17:33 Future Directions in fibrosis prevention: long-acting anti-fibrotic drug delivery systems
Eva Maria Del Amo (Finland)

17:49 Discussion

16:45-18:00 | Room B.1**C****G 43 - MIGs and MIBs (a complete guide to minimally invasive glaucoma surgery)**

Learning Objectives:

1. Understand the principles, indications, and patient selection criteria for minimally invasive glaucoma surgery (MIGs) and minimally invasive bleb surgery (MIBs).
 2. Develop familiarity with current surgical techniques, instrumentation, and intraoperative decision-making.
 3. Evaluate outcomes, manage complications, and integrate MIGs/MIBs into clinical practice.
- A focused course for ophthalmologists on minimally invasive glaucoma (MIGs) and bleb-related (MIBs) surgery. Learn patient selection, surgical techniques, complication management, and practical tips to optimize outcomes and safely integrate these procedures into practice.
- r with the particular technology employed within the instrument, and to demonstrate its potential with applications beyond those of retinal disease diagnosis and follow-up.

Organizer: **Nish Srikantha** (United Kingdom)Co-organizer: **David Lunt** (United Kingdom)16:45 The anatomy and science behind the anterior segment drainage angle
Yih-Horng Tham (United Kingdom)17:01 Developing clefts, intentionally and unintentionally
Wai Siene Ng (United Kingdom)17:17 Shunts and their role in bleb related surgery
Giacinto Triolo (Italy)17:33 Stents and bypassing the TM
Karim El-Assal (United Kingdom)

17:49 Discussion



16:45-18:00 | Room B.2

SIS COS 47 - Next-Generation Biomaterials in Ophthalmic Therapy

This symposium highlights recent advances in biomaterials and translational therapeutic strategies for anterior and posterior segment diseases. Innovative developments in regenerative medicine, implant technologies, and drug delivery systems will be presented, emphasizing their potential to address significant unmet clinical needs. The session will outline the pathway from experimental research through preclinical validation to clinical translation, with particular focus on scalability, safety, and functional outcomes. By integrating material science, bioengineering, and pharmacology, the symposium aims to showcase emerging concepts that may help shape the future of ophthalmic care.

Organizer: **André Schulz** (Germany)

Co-organizer: **Thomas Fuchsluger** (Germany)

- 16:45 Translational research in cornea
Thomas Fuchsluger (Germany)
- 16:58 Toward scalable, transplant-free treatment of advanced keratoconus: development and pre-clinical validation of a bioengineered hydrogel stromal implant
Shuo Li (Switzerland)
- 17:11 Polymer-based wide-field and high-resolution retinal implant
Diego Ghezzi (Switzerland)
- 17:24 Vitreous replacement with hydrogels: from bench to bedside
André Schulz (Germany)
- 17:37 Ocular pharmacokinetics of nanomedicines
Tatu Lajunen (Finland)
- 17:50 Discussion

16:45-18:00 | Room 3.A

SIS LC 42 - Cataract Surgery in Eyes with Compromised Corneas

Cataract surgery in compromised corneas required additional attention as conventional calculation methods shall not be used after corneal surgery. We will provide an overview on the methods and the potential pitfalls and outcomes. Cataract surgery is often planned as combined surgery with corneal transplantation, either penetrating or lamellar, often referred to as Triple or New Triple procedure. We will discuss indications and outcomes of both methods.

When cataract evolves in the late follow-up after corneal diseases such as keratoconus or corneal surgery, especially transplantation, one often must deal with high amounts of astigmatism. In such cases, conventional calculation methods as well as conventional toric intraocular implants only provide limited correction and visual outcome. Customized lenses are available to correct for corneal astigmatism.

Organizer: **Timo Eppig** (Germany)

Co-organizer: **Zisis Gkatzioufas** (Switzerland)

- 16:45 Calculation of intraocular lenses with compromised corneas
Timo Eppig (Germany)
- 17:01 Cataract surgery in eyes with previous corneal transplant: decision making, pearls and pitfalls
Rafael Barraquer (Spain)
- 17:17 Cataract surgery in eyes with Fuchs' endothelial dystrophy
Zisis Gkatzioufas (Switzerland)
- 17:33 Greene's Lasso technique to correct progressive hyperopia following radial keratotomy before or after cataract surgery
Andrea Pastor (Spain)
- 17:49 Discussion

16:45-18:00 | Hall 3.1**C****NSPH 59 - Navigating complexity in the European Board of Ophthalmology Diploma (EBOD) examination**

The European Board of Ophthalmology Diploma (EBOD) exam is a comprehensive assessment designed to ensure a high, harmonized standard of ophthalmic knowledge across Europe. The exam covers general ophthalmology in the written part and subspecialties in the viva voce part. The candidates require more than rote memorisation, and clinical integration and multi-step reasoning are needed. Success in the EBOD exam hinges on a transition from textbook knowledge to clinical application. Challenging questions are designed not merely to test facts but to evaluate the candidate's ability to integrate information and draw conclusions.

Organizer: **Huban Atilla** (*Türkiye*)Co-organizer: **Marcin Stopa** (*Poland*)

- 16:45 What everyone gets wrong: analysis of the hardest questions
Marcin Stopa (*Poland*)
- 16:58 Smarter not harder: timeless methods and cutting edge strategies for exam success
Anna Maino (*United Kingdom*)
- 17:11 Glaucoma differential diagnosis
Barbara Cvenkel (*Slovenia*)
- 17:24 Problems that can be misdiagnosed as amblyopia
Huban Atilla (*Türkiye*)
- 17:37 Pitfalls in cornea and anterior segment diseases
Helena Prior Filipe (*Portugal*)
- 17:50 Discussion

16:45-18:00 | Hall 3.2**JS****RV 25 - Innovations in retinal vascular disorders: clinical practice and future therapies**

This special interest session explores mechanistic and translational advances in retinal vascular disorders, integrating pathophysiology, imaging biomarkers, and innovative therapeutic strategies. Presentations will address targeted drug delivery concepts, including combined suprachoroidal corticosteroid administration with intravitreal anti-VEGF therapy for retinal vein occlusions, and minimally invasive vitrectomy-sparing subretinal r-TPA approaches for AMD-associated submacular hemorrhage. Structural and OCT angiography-derived biomarkers will be discussed as predictors of visual outcome and treatment response. Furthermore, molecular insights into VEGF-A165-mediated endothelial barrier disruption and the restorative role of faricimab will be examined. The session aims to connect endothelial biology, pharmacology, and precision imaging to advance individualized treatment paradigms.

Organizer: **Lyubomyr Lytvynchuk** (*Germany*)Co-organizer: **Sriharanathan Poopalaratnam** (*Sri Lanka*)

- 16:45 Combined simultaneous Supra choroidal TA with intravitreal bevacizumab for RVOs Affiliation-Consultant Vitreo Retinal Surgeon, National Hospital, Kandy, Sri Lanka President- Association of Vitreo Retinal Society Srilanka (AVRSSL)
Sriharanathan Poopalaratnam (*Sri Lanka*)
- 16:58 Vitrectomy-sparing subretinal r-TPA injection for the treatment of AMD-associated submacular hemorrhage
Lyubomyr Lytvynchuk (*Germany*)
- 17:11 OCT biomarkers in subretinal macular hemorrhage: Prognostic implications
Goran Petrovski (*Norway*)
- 17:24 The role of faricimab in reversing VEGF-A165-induced retinal endothelial barrier dysfunction
Heidrun Deißler (*Germany*)
- 17:37 Update on OCT angiography for retinal vascular disease
Stephen Schwartz (*United States*)
- 17:50 Discussion



16:45-18:00 | Room 4.1

C PBP 14 - Can anterior segment OCT replace traditional gonioscopy in clinical practice and research?

Gonioscopy remains one of the most important examinations for structure analysis in glaucoma diagnostics. The differentiation between angle closure, angle closure suspect and open angle is essential not only for the correct diagnosis, but also to draw the best therapeutic consequences out of these findings. In addition to grading systems for the classification of the glaucoma type, pathological changes like abnormal vessels, inflammatory induced changes, pigmentations, clefts can be observed. Nowadays, AS-OCT is a big help and makes it a lot easier, but there are still essential deficits, that do not allow to replace gonioscopy completely by this new examination. In this course, we will show what we can see in normal and pathological eyes and which findings can be observed in AS-OCT and which cannot. We will also explain how a state of the art gonioscopy examination is performed.

Organizer: **Anton Hommer** (Austria)

Co-organizer: **Doreen Schmidl** (Austria)

16:45 How to perform traditional gonioscopy
Nikolaus Hommer (Austria)

17:06 Recognizing pathological findings in gonioscopy
Anton Hommer (Austria)

17:27 Advantages and limitations of anterior segment OCT compared with gonioscopy
Doreen Schmidl (Austria)

17:48 Discussion

18:00-18:45 | Room 2

GA General Assembly

08:30-09:15 | Room 2

KN EVER Lecture delivered by the Past President

The first steps in vision occur when photoreceptors transform light into a signal, which then gets processed through the inner retina via the bipolar cells. The initial steps described by the phototransduction cascade are well understood, while the downstream transmission from photoreceptors to bipolar cells remains to be dissected in more details. Rods synapse with rod ON-bipolar cells and cones synapse with cone ON- and OFF-bipolar cells. Knowledge about the phototransduction cascade was gained by genetic studies on progressive retinal diseases, in which molecules of this cascade are mutated. Knowledge about the downstream signaling from photoreceptors to bipolar cells was gained by genetic studies on congenital stationary night blindness (CSNB), in which molecules of this cascade are mutated. Mutations in *CACNA1F*, *CABP4* and *CACNA2D4* lead to incomplete CSNB, which represents ON- and OFF-bipolar cell dysfunction. This can be confirmed by rod and cone photoreceptor synapse immunolocalization of the respective proteins. Mutations in *NYX*, *GRM6*, *TRPM1*, *GPR179*, *LRIT3* and *EGFLAM* lead to complete CSNB, which represents ON-bipolar cell dysfunction. This can be confirmed by rod and cone ON-bipolar cell immunolocalization of the respective proteins or proteins located at the synapse of the photoreceptors but interacting specifically with ON-bipolar cells. Mutations in other more recently identified genes such as *GNB3*, *RIMS2* and *VSX2* lead to novel CSNB phenotypes also in accordance with the localization of the respective proteins. Different forms of CSNB are associated with high myopia. Here we will present ongoing studies on CSNB gene defect identification, investigation of the pathogenic mechanism by in vitro and in vivo studies, therapeutic approaches and attempts to explain CSNB-associated high myopia.

- 08:30 Introduction
Patrick Yu Wai Man (*United Kingdom*)
- 08:35 State-of-the-art of Congenital Stationary Night Blindness
Christina Zeitz (*France*)



09:15-10:30 | Room 2

SIS ACB 48 - From biology to therapeutic potential of extracellular vesicles in eye diseases

Nanoscale extracellular vesicles (EVs) are important biological messengers mediating communication among sister cells and different cell types, playing crucial functions in both ocular homeostasis and pathologies. This SIS focuses on the biology of EVs, their role in eye disorders, including age-related macular degeneration, glaucoma, diabetic retinopathy, cataract, and inflammatory ocular diseases, as well as their possible use as biomarkers for disease diagnosis/prognosis or even as novel therapeutic tools. Evidence from in vitro, in vivo, ex vivo and human studies on EVs are fundamental to better define the biologic significance of EVs in physiological and pathological contexts, especially in eye diseases with limited treatment options, and to delineate the state-of-art and possible therapeutic perspectives of this promising and intriguing field of research.

Organizer: **Marialaura Amadio** (*Italy*)
Co-organizer: **Kirsi Rilla** (*Finland*)

- 09:15 Extracellular Vesicles: correspondence of loving feelings or threats?
Marialaura Amadio (*Italy*)
- 09:31 Inflammation-derived RPE extracellular vesicles drive outer blood-retinal barrier breakdown and pro-angiogenic remodeling in AMD
Rosa Fernandes (*Portugal*)
- 09:47 Diagnostic and prognostic role of extracellular vesicles
Paola Lanuti (*Italy*)
- 10:03 Extracellular vesicles as ocular therapeutics
Kirsi Rilla (*Finland*)
- 10:19 Discussion



09:15-10:30 | Room B.1

SIS NSPH 33 - Mitochondrial dysfunction in the eye

While mitochondrial dysfunction is well known to ophthalmologists in inherited optic neuropathies, the role of these important organelles is becoming increasingly recognized in the pathogenesis of many other common ocular diseases. This knowledge offers exciting new opportunities both to enhance our understanding of disease processes, but also to develop novel therapeutic approaches. In this special interest session, we aim to introduce the listener to four areas in vision research where mitochondria are central, but often less recognized.

Organizer: **Michael Gilhooley** (*United States*)

Co-organizer: **Chiara La Morgia** (*Italy*)

- 09:15 Retinopathies and optic neuropathies in mitochondrial disorders
Giulia Amore (*Italy*)
- 09:31 Chronic Progressive External Ophthalmoplegia (CPEO)
Rustum Karanjia (*Canada*)
- 09:47 The role of mitochondria in age related macular degeneration
Alfredo Sadun (*United States*)
- 10:03 The mitochondria in glaucoma
Bledi Petriti (*United States*)
- 10:19 Discussion

09:15-10:30 | Room B.2

SIS IM 36 - Uveitis: Everything is infectious!

Uveitis are classically divided in infectious and non infectious causes. Non infectious uveitis, which include so-called idiopathic uveitis, are supposed to be mediated through autoinflammatory and/or autoimmune mechanisms. However both classical and modern molecular biology techniques have revealed that many idiopathic uveitis were in fact infectious uveitis. Anterior CMV uveitis is now a classical example and next generation sequencing provides more and more new cases. In addition, experimental evidence demonstrating the role of microbes in the « auto » activation of the immune system continues to accumulate. Hence this symposium makes this provocative statement: « everything is infectious ! » and invite you to discuss these concepts.

Organizer: **François Willermain** (*Belgium*)

Co-organizer: **Ester Carreño Salas** (*Spain*)

- 09:15 Demasking idiopathic uveitis : the story of CMV and rubella anterior uveitis
François Willermain (*Belgium*)
- 09:31 Looking deeper into the possible infectious causes of idiopathic uveitis through next generation sequencing
Colin Chu (*United Kingdom*)
- 09:47 Are immunosuppressive agents acting through anti-infectious properties ?
Nicholas Jones (*United Kingdom*)
- 10:03 Experimental autoimmune uveitis requires microbial signals : news from the microbiome
Jarmila Heissigerova (*Czech Republic*)
- 10:19 Discussion

09:15-10:30 | Hall 3.A**Women in EVER****09:15-19:30 | Hall 3.1****FP Free Paper Session 3****09:15-10:30 | Hall 3.2****JS EOVS 19 - Novel Clinical Applications of Pupillometry**

The ability to stimulate different classes of light sensitive photopigments within the retina and to isolate selectively different attributes of a visual stimulus make pupil-based studies and clinical tests more attractive. The discovery of multiple components of the PLR response and the involvement of ipRGCs have enhanced our basic understanding of pupil mechanisms and also promoted the development of chromatic pupillometry and new challenges. The need to separate pupil colour and light reflex responses when using coloured stimuli remains a challenge, particularly when the coloured stimuli cause large changes in retinal illuminance. Despite these reservations, significant advances have also been made in understanding the contribution different photoreceptors and melanopsin make through ipRGCs to the overall pupil constriction and recovery following extended exposure to coloured lights.

Organizer: **John Barbur** (*United Kingdom*)Co-organizer: **Aki Kawasaki** (*Switzerland*)09:15 Pupil curiosities – patients with unusual pupil responses ‘Bizarre pupils I have known’
Gordon Plant (*United Kingdom*)09:28 Objective pupillometry as a marker for brain stem health in neuro-critical care
Shrikant Bharadwaj (*India*)09:41 Illuminating retinal function through the pupil light response
Elisa Salamin (*Switzerland*)09:54 Chromatic pupil campimetry in disorders of the retina and optic pathway
Carina Kelbsh (*Germany*)10:07 Can pupil constrictions in response to central processing of colour signals be used to diagnose colour deficiencies
John Barbur (*United Kingdom*)

10:20 Discussion



09:15-10:30 | Room 4.1

SIS RV 34 - The Vitreous – From Degeneration to Therapeutic Strategies

The symposium offers a comprehensive perspective on age-related vitreous alterations, bridging basic science, advanced imaging, and clinical practice. Novel multimodal approaches will enhance understanding of structural and biochemical degeneration, complemented by state-of-the-art OCT visualization of the entire vitreous body. Key pathomechanisms, including vitreoschisis and vitreous cortex remnants, will be connected to surgical strategies for PVR prevention. Furthermore, emerging biomarkers for vitreous floaters and the role of the vitreous matrix in ocular drug delivery will underscore innovative therapeutic opportunities and ongoing translational challenges. This symposium is sponsored by ebiga-VISION GmbH.

Organizer: **André Schulz** (Germany)
Co-organizer: **Marc De Smet** (Switzerland)

- 09:15 Degeneration of the aging vitreous: new multimodal insights
André Schulz (Germany)
- 09:28 Imaging of aging changes in whole vitreous body by OCT
Ireneusz Grulkowski (Poland)
- 09:41 Vitreoschisis and vitreous cortex remnants: from basic mechanisms to surgical strategies in PVR prevention
Koen Van Overdam (The Netherlands)
- 09:54 Biomarkers for vitreous floaters – current state of the art
Marc De Smet (Switzerland)
- 10:07 The vitreous matrix – opportunities and challenges in ocular drug delivery
Maximilian Hammer (Germany)
- 10:20 Discussion

16:15-16:45 | Coffee break - Exhibition Area

11:05-11:50 | Room 2

KN Ophthalmic Research Keynote Lecture

Fibrosis and atrophy continue to dominate the picture of treated neovascular age-related macular degeneration. Fibrosis causes distortion and disruption of the outer retinal architecture as well as cell layer losses and in addition interposes a thick layer of abnormal tissue between the choroid and the outer retina thus potentially depriving the RPE and photoreceptors of vital oxygen and nutritional support. By contrast pure atrophy results in loss of the outer retinal layers and choriocapillaris without the development of additional abnormal tissue replacing the outer retina. My talk will address (a) the discrepancies in the literature on prevalence and incidence of fibrosis and atrophy (b) Barriers to detection of these pathological features by in vivo imaging (c) their temporal and spatial relationships and (d) their individual and combined effects on central macular function, (e) shared and distinct ocular risk factors for each and (f) current attempts to mitigate or prevent their development.

- 11:05 Introduction
Rui Bernardes (Portugal)
- 11:10 Dissecting pathways to fibrosis and atrophy in treated neovascular AMD
Usha Chakravarty (United Kingdom)



11:50-12:55 | Room 2 - Room 4.1**POS** **Poster Session 3****12:55-13:55 | Room 2 - Room 4.1****CIS** **Industry Sponsored Lunch Symposium****14:00-15:15 | Room 2****JS** **G 14 - Bridging between ocular surface disease and glaucoma – Integrating care for vision preservation**

Ocular surface disease (OSD) and glaucoma frequently coexist, yet they are often managed in isolation. Increasing evidence demonstrates that chronic glaucoma therapy, particularly with preserved topical medications, can significantly alter ocular surface homeostasis, leading to discomfort, reduced adherence, and impaired visual function. The symposium will provide clinicians and researchers with an integrated framework for understanding and managing these interconnected conditions.

Organizer: **Miriam Kolko** (Denmark)Co-organizer: **Juana Gallar** (Spain)

- 14:00 Why is it essential to consider the ocular surface in glaucoma care
Miriam Kolko (Denmark)
- 14:16 Basic science insights into how chronic exposure to preservatives and other inactive ingredients in eye drops can alter ocular surface cells and the immune microenvironment
Juana Gallar (Spain)
- 14:32 Clinical relevance of artificial tears when treating ocular surface disease in glaucoma patients
Jesús Pujol Martí (Germany)
- 14:48 Dry eye and fibrosis in glaucoma patients, Is limited to the ocular surface? The role of regenerative medicine
Jesus Merayo-Llaves (Spain)
- 15:04 Discussion



14:00-15:15 | Room B.1

SIS NSPH 61 - Inherited optic neuropathies: genotype-phenotype association and atypical phenotypes

This course explores the evolving landscape of inherited optic neuropathies (IONs), focusing on the critical link between genetic mutations and clinical expression. While classic LHON and DOA are well-characterized, next-generation sequencing (NGS) has revealed a spectrum of “atypical” phenotypes that challenge traditional diagnostic boundaries.

Key discussion topics:

- Genotype-phenotype mapping: analyzing how variants in OPA1, WFS1, and mtDNA impact disease onset and severity;
- Decoding atypicality: identifying syndromes with systemic features and recognizing cases mimicking inflammatory or toxic neuropathies;
- Diagnostic precision: leveraging multimodal imaging to differentiate subtle phenotypic variations;
- Future directions: how deep phenotyping facilitates personalized gene therapy and neuroprotection.

Organizer: **Marco Battista** (Italy)

Co-organizer: **Guy Lenaers** (France)

- 14:00 Phenotypic heterogeneity in Optic Atrophy
Michele Carbonelli (Italy)
- 14:13 Genotype-phenotype correlations in hereditary optic neuropathies: new lessons from cohort studies
Aymane Bouzidi (France)
- 14:26 Novel imaging modalities in Inherited Optic Neuropathy
Maximilian-Joachim Gerhardt (Germany)
- 14:39 Macular involvement in Inherited Optic Neuropathies
Marco Battista (Italy)
- 14:52 The Wolfram spectrum: the good, the rare and the atypical
Raoul Kanav Khanna (United Kingdom)
- 15:05 Discussion

14:00-15:15 | Room B.2

SIS PBP 50 - Therapeutic Neuroprotection of the Retina: New Frontiers Beyond Neurodegeneration Control

Retinal neurodegeneration is a shared feature of multiple ocular diseases leading to irreversible vision loss. This symposium will address recent advances in retinal neuroprotection, integrating insights from molecular mechanisms to translational therapeutic strategies. Topics will include neuroinflammation, oxidative stress, mitochondrial dysfunction, and innovative interventions such as cell-based therapies, extracellular vesicles, gene therapy, and pharmacological approaches. Speakers will discuss experimental evidence, emerging biomarkers, and challenges in clinical translation. The session aims to connect basic and clinical research perspectives, promoting interdisciplinary collaboration and identifying future strategies to preserve retinal function and delay neurodegeneration.

Organizer: **Johnny Di Pierdomenico** (Spain)

Co-organizer: **Marcelino Avilés-Trigueros** (Spain)

- 14:00 Comparison of nutraceutical vs. synthetic treatments in delaying retinal degeneration: evidence from retinitis pigmentosa and diabetic retinopathy animal models
Ilaria Piano (Italy)
- 14:16 Ophthalmology as a strategy for vision restoration: functional evidence in a model of absolute blindness
Santiago Milla Navarro (Spain)
- 14:32 The superpower of hibernation: harnessing nature to safeguard vision
Francisco Nadal-Nicolas (United States)
- 14:48 Advances in retinal neuroprotection: the promise of cell-based therapies
Jhoana Abigail Guarnizo-Campoverde (Spain)
- 15:04 Discussion

14:00-15:15 | Hall 3.A**FP** Free Paper Session 4**14:00-15:15 | Hall 3.1****SIS** RV 12 - Posterior segment manifestations of systemic disorders and medications

The intersection of systemic health and ocular pathology requires a robust interdisciplinary approach, merging insights from diverse medical fields with advanced diagnostics. Identifying these associations often demands clinical intuition honed by experience with rare cases that fall outside routine practice.

In this session, medical retina specialists will explore the complex relationship between systemic disorders and the eye. Key topics include:

- Uveitis: Analyzing posterior segment symptoms of systemic inflammation.
- Optic Nerve Diseases: Identifying neurological and vascular signals.
- Rare Pathologies: Managing malignancies and metabolic disorders.
- Drug Toxicity: Reviewing retinal complications from systemic medications.

Every discussion is anchored by real-world case presentations to bridge the gap between theory and clinical practice.

Organizer: **Stephen Schwartz** (*United States*)

Co-organizer: **Maciej Gawęcki** (*Poland*)

14:00 Retinal complications of infectious/inflammatory diseases
Maurizio Battaglia Parodi (*Italy*)

14:13 Retinal complications of other systemic diseases (malignancies, genetic/metabolic disorders, others)
Stephen Schwartz (*United States*)

14:26 Retinal complications of systemic medications
Maciej Gawęcki (*Poland*)

14:39 Optic nerve complications of systemic diseases
Carlos Mendosa (*United States*)

14:52 Endogenous endophthalmitis in systemic disorders
Perfecto Cagampagn Iii (*Philippines*)

15:05 Discussion



14:00-15:15 | Hall 3.2

SIS EOVS 18 - Vision beyond just visual acuity

Visual acuity has been considered the gold standard endpoint for clinical trials, but recently it became evident that additional endpoints are required for many indications including geographic atrophy and inherited retinal diseases. Here, we provide an overview of promising clinical endpoints, with a focus on retinal diseases. We explore functional and structural biomarkers, quality of life measures, and critically assess their potential as endpoints in pivotal trials. This highly interdisciplinary symposium brings together leading experts from ophthalmology (Scholl), ophthalmic technology (Ghezzi & Schmetterer) and neuroscience (Herzog). It features clinical findings from large-scale studies in age-related macular degeneration and inherited retinal diseases, state-of-the-art retinal imaging and structure-function correlation, technological innovations and extensive visual testing.

Organizer: **Michael Herzog** (Switzerland)

Co-organizer: **Hendrik Scholl** (Austria)

- 14:00 How is visual performance improved after cataract surgery?
Michael Herzog (Switzerland)
- 14:16 Projecting visual benefit when slowing down macular degeneration
Hendrik Scholl (Austria)
- 14:32 Optoretinography as a potential future outcome for retinal studies
Leopold Schmetterer (Austria)
- 14:48 Evaluating and measuring visual improvements in blind patients implanted with visual implants
Diego Ghezzi (Switzerland)
- 15:04 Discussion

14:00-15:15 | Room 4.1

C PO 53 - Correcting for magnification on fundus photographs

Fundus imaging plays a central role in ophthalmology for identifying and tracking retinal disorders. Yet, anatomical and optical differences between individuals cause scaling variations, which hinder distance measurements on fundus photographs. This course will explore the optical mechanisms that give rise to these discrepancies and outline, both from a theoretical and practical point, available strategies for correcting them. We will then highlight why these corrections matter in clinical practice and research, illustrating their impact in applications such as quantifying areas of chorioretinal atrophy in patients with high myopia. In addition, we will address how to manage scaling changes in longitudinal datasets and when monitoring patients over time, including situations where ocular growth or emmetropization plays a role.

Organizer: **Jan-Willem Beenakker** (The Netherlands)

Co-organizer: **Rebekka Heitmar** (United Kingdom)

- 14:00 Understanding and correcting for scaling of fundus photographs
Jan-Willem Beenakker (The Netherlands)
- 14:16 Impact of emmetropization and refractive errors on fundus images
Rebekka Heitmar (United Kingdom)
- 14:32 Calibrating your fundus camera, a practical course
Iris Mulder (The Netherlands)
- 14:48 Correcting for changes in refractive error in longitudinal studies
Kristy T. Rodríguez-Ramírez (Germany)
- 15:04 Discussion

15:15-15:45 | Coffee break - Exhibition Area**15:50-16:35 | Room 2****KN European Academy of Ophthalmology Keynote Lecture**

- 11:05 Introduction
Andrzej Grzybowski (Poland)
- 11:10 Femtolasers in corneal, lenticular and glaucoma surgery
Zoltan Nagy (Hungary)

16:40-17:55 | Room 2**SIS G 46 - Towards regenerative medicine in advanced glaucoma: molecular biology, genetics, retinal structure and function, and translational neuroscience perspectives**

In this symposium, we will present key outcomes from three years of collaborative, interdisciplinary research conducted within the EU-funded doctoral network EGRET-AAA. This network has trained 15 doctoral candidates across Europe on projects aimed at developing novel diagnostic and therapeutic solutions for advanced glaucoma. Our symposium program will span improved diagnostic approaches, quantitative assessment of structure and function along the visual pathway (i.e., from retina to visual cortex) and innovative genetic and regenerative approaches, including stem cell-based therapies. By integrating clinical expertise, advanced imaging, genetic and molecular research, and translational neuroscience, this symposium highlights how coordinated European collaboration is advancing precision diagnostics and paving the way toward disease-modifying treatments for advanced glaucoma.

Organizer: **Nomdo Jansonius** (The Netherlands)
Co-organizer: **Hinke Halbertsma** (The Netherlands)

- 16:40 Introduction to EGRET-AAA
Nomdo Jansonius (The Netherlands)
- 16:53 Quantifying retinal structure and function in glaucoma: current progress in perimetry and retinal imaging
Khaldoun Al-Nosairy (Germany)
- 17:06 Quantifying visual pathway structure and function in advanced glaucoma
Frans Cornelissen (The Netherlands)
- 17:19 Identifying molecular targets for optic nerve repair in advanced glaucoma
Coralie Fassier (France)
- 17:32 From GWAS to neuroprotective pathways: The role of genes and cilia in POAG
Harold Snieder (The Netherlands)
- 17:45 Discussion



16:40-17:55 | Room B.1

JS NSPH 24 - Recent advances in the diagnosis and management of childhood glaucoma

Childhood glaucoma can be a significant cause of blindness. In recent years, there have been advances in diagnosis, treatment, and follow-up, as well as in the refinement of minimally invasive surgical techniques and the integration of artificial intelligence (AI) into diagnostics. Genetic and molecular research has expanded the known genetic landscape of primary congenital glaucoma. The management of congenital glaucoma is evolving from a reactive surgical model towards a proactive, personalised approach. The integration of genetic screening, advanced imaging, and micro-invasive surgery is significantly improving visual outcomes and reducing the surgical burden on paediatric patients.

Organizer: **Huban Atilla** (Türkiye)
Co-organizer: **Esther Hoffmann** (Germany)

- 16:40 Primary congenital glaucoma
Barbara Cvenkel (Slovenia)
- 16:56 Other childhood glaucomas
Kivanc Gungor (Türkiye)
- 17:12 Genetics in congenital and juvenile glaucoma
Dominique Bremond-Gignac (France)
- 17:28 The prospective randomized controlled "Pirate" trial: is 360° trabeculotomy the new future in congenital glaucoma treatment?
Esther Hoffmann (Germany)
- 17:44 Discussion

16:40-17:55 | Room B.2

SIS PBP 37 - Retinal Artery–Vein classification with deep learning: state-of-the-art, challenges, and clinical impact

Retinal circulation exhibits inherent asymmetry: arteries regulate inflow and metabolic delivery, while veins reflect downstream resistance and oxygen consumption. Eye and systemic diseases such as hypertension and diabetes therefore affect arteries and veins differently, making accurate artery–vein (A/V) differentiation essential for meaningful vascular analysis.

This symposium discusses how modern computational and deep learning approaches enable physiologically meaningful A/V differentiation in fundus photography and OCT angiography, addressing robustness across populations and imaging settings, structural consistency of vascular trees, and artery- and vein-specific metrics. By critically evaluating progress and remaining limitations, the session clarifies the clinical readiness of automated A/V analysis.

Organizer: **Ulf-Dietrich Braumann** (Germany)
Co-organizer: **Rebekka Heitmar** (United Kingdom)

- 16:40 Clinical imaging variability and real-world obstacles in Artery/Vein differentiation
Rebekka Heitmar (United Kingdom)
- 17:01 Physiologically constrained modeling for robust retinal Artery–Vein differentiation
Andres Bribiesca-Sanchez (Mexico)
- 17:22 Differential Artery–Vein analysis in OCT angiography: from segmentation to functional biomarkers
Xincheng Yao (United States)
- 17:43 Discussion

16:40-17:55 | Hall 3.1**SIS IM 26 - Common diagnostic errors and misdiagnosis in uveitis: how to avoid clinical pitfalls**

Misdiagnosis and diagnostic delay remain major causes of visual loss in uveitis. This case-based educational course focuses on the most common diagnostic errors encountered in clinical practice, including infectious retinitis treated as non-infectious uveitis, vitreoretinal lymphoma misdiagnosed as autoimmune inflammation, inflammatory conditions mimicking macular diseases or inherited retinal dystrophies, and frequent pitfalls in pediatric uveitis. Through real-world cases and multimodal imaging, speakers will highlight key red flags, diagnostic clues, and structured approaches to avoid inappropriate treatment and delayed diagnosis. Practical take-home messages will be provided to improve diagnostic accuracy and patient outcomes.

Organizer: **Francesco Pichi** (Canada)

Co-organizer: **Careen Lowder** (United States)

- 16:40 Infectious retinitis misdiagnosed as non-infectious uveitis
Nomdo Jansonius (The Netherlands)
- 16:53 Retinal lymphoma Misdiagnosed as autoimmune uveitis
Elisabetta Miserocchi (Italy)
- 17:06 Posterior uveitis mimicking exudative maculopathy
Francesco Pichi (Canada)
- 17:19 Inflammatory uveitis mimicking inherited retinal dystrophies
Ester Carreño Salas (Spain)
- 17:32 Pediatric uveitis: common diagnostic and management errors
Debra Goldstein (United States)
- 17:45 Discussion

16:40-17:55 | Hall 3.2**SIS RV 13 - Ultra-wide-field diagnostics of retinal disorders**

Ultra-wide -field diagnostics has been used in ophthalmological practice for more than ten years. That refers mainly to UWF- angiographic examinations , such as UWF-fluorescein angiography or UWF-indocyanine green angiography. Recent years faced the onset of UWF -OCT and UWF-angio-OCT examinations, that are nowadays introduced to clinical practice. As UWF_FA or UWF-ICGA have established and reliable position in modern diagnostics, UWF OCT scanning still requires precise recommendations and validation in everyday practice. The programme of the course challenges this task with presentation of clinical examples as well as practical issues associated with three UWF examinations: angiography, OCT and angio-OCT. The faculty are authors of many publications on the subject as well as practical users of UWF equipment.

Organizer: **Maciej Gawęcki** (Poland)

Co-organizer: **Andrzej Grzybowski** (Poland)

- 16:40 UWF – fluorescein angiography. Guide to diagnostics
Paolo Silva (United States)
- 17:01 UWF - OCT – guide to diagnostics and novel findings
Maciej Gawęcki (Poland)
- 17:22 UWF-OCTA – practical utility
Ali Erginay (France)
- 17:43 Discussion



16:40-17:55 | Room 4.1

C COS 39 - Ocular pain: an emerging disease in ophthalmology?

Ocular pain is increasingly recognized as a distinct and clinically important entity. Once considered secondary to other eye diseases, it is now clear that it can persist independently and significantly impair quality of life. This course will review the pathophysiology, classification, diagnostic approaches, and therapeutic strategies for ocular pain. Designed for ophthalmologists and basic scientists, it provides essential knowledge to understand, diagnose, and manage this emerging and impactful condition.

Organizer: **Giulio Ferrari** (*Italy*)

Co-organizer: **Piera Versura** (*Italy*)

- 16:40 Basic mechanisms of ocular pain
Giuseppe Suanno (*Italy*)
- 16:53 Modalities for quantification of ocular pain
Giulio Ferrari (*Italy*)
- 17:06 Blood derived products as a treatment of ocular pain
Piera Versura (*Italy*)
- 17:19 Ocular pain in rare corneal and ocular diseases
Matteo Pederzoli (*Italy*)
- 17:32 Dry eye disease and ocular pain
Emanuela Aragona (*Italy*)
- 17:45 Discussion

18:00-18:35 | Room 2

PS Award Ceremony

