

## RESEARCH PROGRAM

### Friday, June 13<sup>th</sup>. School of Medicine – UAH. Alcalá de Henares.

#### 9:00- 9:15. **Opening ceremony.**

- Vicedean of the School of Medicine - University of Alcalá: *Prof. Francisco Germain Martínez.*
- President of SIREV: *Prof Juan José Salazar Corral*
- Presidents of the SIREV 2025 meeting: *Prof. Pedro de la Villa & Prof. Francisco Muñoz Negrete.*

#### 9:15-10:30. **Selected Doctoral Thesis Presentations.**

- Chaired by: *Francisco Germain Martínez & Marcelino Avilés Trigueros.*
- Title: *Temporal profile characterization of glial cell activation in an experimental model of glaucoma and analysis of the anti-inflammatory and neuroprotective effect of a saffron extract.* Speaker: *Fernández-Albarra, JA*
- Title: *Fatty Acids in Retinal Degeneration and Expression of the DHA transporter, MFSD2a, in the retina.* Speaker: *Ruiz-Pastor, MJ*
- Title: *Long-term efficacy and safety of the PRESERFLO microshunt implant.* Speaker: *Sanchez Jean R.*
- Title: *Micro and nanotechnologies for the treatment of neurodegenerative eye diseases.* Speaker: *Brugnera, M*

#### 10:30-11:00. **Plenary Conference: Basic – Translational Research in the Retina. -**

Chaired by: *Manuel Vidal Sanz.*

- Title: *Nature-Inspired Neuroprotection: Leveraging Hibernation Biology to Treat Glaucoma*  
Lecturer: *Francisco Nadal Nicolas.* Univ. Murcia

#### 11:00-12:15. **Coffee break (included) + Poster Presentations.**

#### 12:15-13:30. **Session I. Special Interest Symposium. (Basic and translational research on degenerative retinal diseases).**

- Chaired by: *Ana Ramírez Sebastián & Pedro Lax Zapata*
- Title: *Understanding neurodegeneration in diabetic retinopathy: A focus on its signalling profile.*  
Speaker: *Irene Andrés Blasco.* Univ. Valencia.
- Title: *Orchestrating innate immunity: A new strategy against Retinitis Pigmentosa.*  
Speaker: *Catalina Hernández.* CIB Margarita Salas. CSIC
- Title: *Evaluating the neuroprotective potential of cell therapy for retinal degenerative diseases.*  
Speaker: *Iván Fernández Bueno.* Univ. Valladolid
- Title: *Inflammatory response in the visual pathway in different models of multiorgan failure: therapeutic approach.*  
Speaker: *Meritxell Lopez Gallardo.* Univ. Complutense
- Title: *Neuroprotective Effects of Bone Marrow Mononuclear Cell-Derived Exosomes in Experimental Retinal Degeneration.*  
Speaker: *Johnny Di Pierdoménico.* Univ. Murcia
- Title: *Where There Was Darkness: Optopharmacology as a Beacon for Vision.*  
Speaker: *Santiago Milla Navarro.* Univ. Alcalá/IBEC

13:30-15:00. **Lunch** (*included*) + **Poster Presentations**

15:00-16:00. **Session A. Short oral communications:** Oral communications selected from the submitted abstracts.

- Chaired by: *Cecilia Fernández Vaquero & Elena Salobrar García Martín.*
- O-01 (P.23):** Alzheimer's Disease Through Tears: A Systematic Review. O - 01
- O-02 (P.24):** Citicoline and CoQ10 modulate retinal inflammation in mouse model of ocular hypertension.
- O-03 (P.25):** Topical Administration of Preimplantation Factor (sPIF) as a Potential Therapy for Retinitis Pigmentosa.
- O-04 (P.26):** Role of HMGB1 in Retinitis Pigmentosa Progression: Therapeutic Potential of the BoxA Antagonist in Retinal Degeneration.
- O-05 (P.27):** Diagnostic Performance of Artificial Intelligence-Assisted Fundus Imaging in Glaucoma Detection: A Systematic Review and Meta-Analysis
- O-06 (P.28):** Ophthalmic Administration of Adalimumab Encapsulated in Lipid Nanocarriers for Retinitis Pigmentosa
- O-07 (P.29):** Diabetes Complications: Diabetic Retinopathy and the Potential Benefits of Saffron
- O-08 (P.30):** Gut microbiota changes in a large family with central areolar choroidal dystrophy
- O-09 (P.31):** Temporal dynamics of gene expression following optic nerve crush in a rodent model
- O-29 (P.51):** Simulated chronic daily administration of liposomal eye drops for glaucoma treatment

16:00-17:15. **Session II. Special Interest Symposium.** (Innovative research on retinal biochemistry, physiology and pharmacology).

- Chaired by: *Iván Fernández Bueno & Francisco J. Valiente Soriano.*
- Title: **Neurobiology of the Visual System and Therapy of Neurodegenerative Diseases.**  
Speaker: *Pedro Láz Zapata.* Univ. Alicante
- Title: **Basis of Physiopathology in a Novel Murine Model of Autosomal Dominant Retinitis Pigmentosa Type 10 by Mutations in Inosine Monophosphate Dehydrogenase 1.** Speaker: *Ana Mendez.* Univ. Barcelona
- Title: **Expanding the retinal repertoire. An uncharacterized retinal ganglion cell subpopulation.** Speaker: *Marcelino Avilés Trigueros.* Univ. Murcia
- Title: **New omics and zebrafish genetic models in anterior segment developmental disorders.**  
Speaker: *José Daniel Aroca Aguilar.* Univ. Castilla la Mancha
- Title: **Targeting multiple cell death pathways with combined neuroprotective strategies in a retinal Ischemia/Reperfusion model.**  
Speaker: *Francisco J. Valiente Soriano.* Univ. Murcia
- Title: **Glaucoma: Exploring Pathogenic Mechanisms and Retinal Glial Cells Response to Injury.**  
Speaker: *José Antonio Fernández-Albarral,* Univ Complutense

17:15-17:45. **Coffee break** (*included*).

17:45-18:45. **Session B. Short oral communications:** Oral communications selected from the submitted abstracts.

- Chaired by: *Santiago Milla Navarro & Johnny Di Pierdomenico.*
- O-10 (P.32):** Retinal Microglia Quantification in the APPNL-F/NL-F Alzheimer's Model Using An Automated Image Analysis Tool
- O-11 (P.33):** Exploration of the Use of Luminescent Nanoparticles as a Potential Diagnostic Tool: Distribution and Effects in Mouse Retinas
- O-12 (P.34):** Analysis Of The Sex-Related Inflammatory Response To Glaucoma In Mice
- O-13 (P.35):** Inflammation Of Glial Cells In The Visual Pathway In An Animal Model Of Glaucoma

- O-14 (P.36):** Visual Distorsionometry: An Alternative Tool For Measuring Visual Quality
- O-15 (P.37):** Characterization of Axon Initial Segment alterations in Retinal Ganglion Cells during axonal degeneration
- O-16 (P.38):** Effect of N-acetyl Cysteine (NAC) Treatment on Retinal Function in PRPH2-Related Mouse Models
- O-17 (P.39):** Inhibitory effect of cones over rods mediated by retinal horizontal cells: observation from experimental visual evoked potencial (VEP) in humans
- O-18 (P.40):** Neuroretinal Dysfunction Associated with the Pharmacological Interaction of Protease Inhibitors, Phosphodiesterase Type 5 Inhibitors, and Recreational
- O-30 (P.53):** Neuroprotective Effects of Intravitreal Human Retinal Exosomes in an animal Axotomy-Induced RGC Degeneration Model

**18:45-19:15. Spanish ARVO Chapter.**

- Chaired by: [Gonzalo Carracedo](#).
- Title: Melatonergic and Dopaminergic Receptors Expression in the Guinea Pig Posterior Pole for Myopia Research.  
Speaker: [Gonzalo Valdes](#)
- Title: In vitro study of insulin loading and release in different soft contact lens materials.  
Speaker: [Maria Romaguera](#)
- Title: Neurodegeneration after retinal detachment is conditioned by the TP53 p.Arg72Pro polymorphism.  
Speaker: [Nadia Regina Galindo](#)

**19:15-19:45. RICORS Ophthalmology.**

- Chaired by: [Maria Paz Villegas Pérez](#).
- Speakers: [Members of the RICORS research network](#).

**19:45-20:30. Final Poster Presentations (included).**

**20:30 . Dinner (not included)**

## Saturday, June 14<sup>th</sup>. Hospital Ramón y Cajal. Madrid.

**9:30-10:30. Selected Master Thesis Presentations.**

- Chaired by: [Marta Agudo Barriuso & Iván Fernández Bueno](#)
- Title: Analysis of the neuroprotective effect of mesenchymal stromal cells or their derivatives in neuronal death caused by acute systemic inflammation. Speaker: [Guarnizo Campoverde, JA](#)
- Title: The Retinal Dopaminergic Circuit alterations in Huntington's and Alzheimer's diseases. Speaker: [Blanco Hernán, P](#)
- Title: Murine Model of dopaminergic amacrine cell depletion: Visual Manifestations  
Speaker: [Espitia Arias, MD](#)
- Title: Study of microglial depletion in a young mouse model of taupathia.  
Speaker: [Rodríguez-Perez Silva, N](#)
- Title: Exploring the Use of Luminescent Nanoparticles as a Potential Diagnostic Tool: Distribution and Effects in Mouse Retinas.  
Speaker: [Segovia Oller B.](#)

## 10:30-11:30. Session III. Special Interest Symposium. -

Chaired by: [Verónica Sanchez](#).

- Title: [Corneal 3D printing](#).  
Speaker: [María P de Miguel](#). La Paz Univ. Hospital
- Title: [Insulin and losartan eye drops, rational use](#).  
Speaker: [Mercedes Serrador](#). Univ. Complutense
- Title: [Intracorneal segments of human tissue for the treatment of keratoconus](#).  
Speaker: [Verónica Sanchez](#). Ramon y Cajal Univ. Hospital
- Title: [Therapeutic contact lenses and drug delivery](#). Speaker: [Gonzalo Carracedo](#). Univ. Complutense

## 11:30-12:00. Coffee break.

## 12:00-13:00. Plenary Conference. Dedicated to the late Prof. José Carlos Pastor: [Translational and Clinical Research](#).

- Chaired by: [Yolanda Diebold](#).
- Title: [The value of the retina in the diagnosis and follow-up of Alzheimer's disease](#) Lecturer: [José Manuel Ramírez Sebastián](#) (SIREV past president).

## 13:00-14:00. Session C. Short oral communications: [Oral communications selected from the submitted abstracts](#).

- Chaired by: [Pablo de Arriba Gómez & Verónica Sánchez](#)
- O-19 (P.41):** [New insights of interleukin-1 beta secretion in dry eye disease](#)
- O-20 (P.42):** [The retina as a biomarker in vascular dementia: OCT and OCTA](#)
- O-21 (P.43):** [Metabolomic and molecular signature in tears of patients with primary open-angle glaucoma. A pilot study](#)
- O-22 (P.44):** [Leukocyte Populations in the Vitreous and Retina of Patients with Retinal Detachment](#)
- O-23 (P.45):** [Corneal Regeneration using Mesenchymal Progenitors Cultivated on Contact Lenses](#)
- O-24 (P.46):** [Intraoperative Anterior Segment OCT to Evaluate Tube-Endothelium Distance in PRESERFLO Surgery](#)
- O-25 (P.47):** [Shifts in Glaucoma Surgical Approaches in Spain: Experience from a Tertiary Hospital \(2010-2022\)](#)
- O-26 (P.48):** [Preservation of Corneal Epithelial Identity and Structure in Cultures Derived from ASA Surgery](#)
- O-27 (P.49):** [Corneal Endothelial Cell Loss In Uncomplicated Cataract Surgery: Influence Of Phacoemulsification Energy and Time](#).
- O-28 (P.50):** [Blepharospasm management in Schwartz-Jampel syndrome: a systematic review](#)

## 14:00-14:15. SIREV 2025 Awards and Closing Remarks.

- Chaired by: [María Dolores Pinazo Duran & Elena Bendala](#)
- [Santiago Grisolia Doctoral Thesis Award](#). The finalist will receive a 1.500-euro award.
- [Dra. Pinazo-Durán Work of Master Award](#). The finalist will receive a 500-euro and a Diplome.
- [SIREV Abstract Presentation Award](#). The finalist will receive a 500-euro and a Diplome.

## 14:15-14:30. SIREV General Assembly 2025.

- President: [Juan José Salazar Corral](#).

14:30. **Lunch** (*not included*)