DETAILED PROGRAM

NORTH AMERICAN
NEURO-OPHTHALMOLOGY
SOCIETY

2025 NANOS

51ST ANNUAL MEETING

MARCH 15-20
JW MARRIOTT
STARR PASS
TUCSON, AZ

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On-Demand
April 15 - September 30, 2025

PROGRAM

• • • TIMES ARE LISTED IN MOUNTAIN STANDARD TIME (MST) • • •

SATURDAY, MARCH 15TH

8:00 am – 12:00 pm **NANOS Board of Directors Meeting** (board members only) ..... San Luis

1:00 pm – 7:30 pm **Registration/Help Desk**..... Foyer

2:00 pm – 7:30 pm **Descriptive Posters Set-Up** ..... Arizona Ballroom 1-6
Descriptive posters are encouraged to be set up on Saturday to allow meeting attendees to preview them during Sunday breakfast. If presenters are unable to meet these times, they may set up their posters as soon as they are onsite during registration desk hours. We kindly ask all presenters to ensure their posters are displayed prior to the start of the poster session on Sunday at 1:00 pm to avoid any disruption. Thank you for your understanding and cooperation!

2:30 pm – 3:45 pm **A Taste of Neuro-Ophthalmology: Cases with Experts** (Trainees only)..... Arizona Ballroom 7
Moderator: Nancy Newman, MD
Faculty: Steven Galetta, MD, Valerie Biousse, MD, Andrew G. Lee, MD, Vivek Patel, MD

Join us for a **trainees-only** (medical students, residents, fellows-in-training) whirlwind tour through the many ways one can practice neuro-ophthalmology as illustrated by case presentations. Emergency care, complex diagnoses, multi-disciplinary care, surgical care and translational science will be highlighted.

4:00 pm – 5:00 pm **Neuro-Radiology Symposium: Anatomy and Pathology of the Ophthalmic Segment of the Trigeminal Nerve: Focus on Perineural Tumor Spread (PTS) [1.0 CME]** ..... Tucson Ballroom
Moderator: Mays El-Dairi, MD
Speaker: Philip R. Chapman, MD

Upon completion of this session, participants should be able to:
(1) Review normal anatomy of ophthalmic division of trigeminal nerve (V1) and its relationship to adjacent structures in the orbit.
(2) Understand the role of this nerve in perineural tumor spread of cancer around the orbit, especially cutaneous malignancy.
(3) Examine subtle or early cases that can be challenging.

5:00 pm – 6:00 pm **Walsh Practice & Orientation** (Walsh presenters & moderators only)..... Tucson Ballroom
Mandatory for all Walsh presenters and moderators.

6:00 pm – 9:00 pm **Welcome Reception & Awards**.....Ania Terrace
Sponsored by Viridian Therapeutics, Inc. (bad weather: Arizona Ballroom and Foyer)

Reconnect with your NANOS colleagues and enjoy some music and great food. There will be lawn games available for the young (at heart) organized by the YONO committee. The Dr. Ivy Dreizin WIN Leadership Development Grant, the Thomas & Susan Carlow Young Investigator Award, Hoyt Lecture Award, Merit Awards, Lawton Smith Award (JNO), and Top NOVEL Contributors will be presented. Don't miss out on this exceptional opportunity to network while experiencing the vibrant and unique culture of Tucson. Heavy hors d'oeuvres buffet and drink tickets printed with your badge will be accepted. Included with meeting registration. Guest tickets are available for purchase ($150 adult, $50 children) with online registration or onsite at the Registration Desk.

SUNDAY, MARCH 16TH

6:30 am – 6:00 pm **Registration/Help Desk**..... Foyer

6:30 am – 5:00 pm **Exhibit Hours**..... Foyer

6:30 am – 7:30 am **Breakfast with Exhibitors**..... Arizona Ballroom & Foyer

6:30 am – 7:30 am **Descriptive Posters Preview** (no author standby) ..... Arizona Ballroom 1-6

6:30 am – 7:30 am **YONO Breakfast with Experts**..... Arizona Ballroom 7
- Career pathways for the neurology trained NO
- Career pathways for the ophthalmology trained NO
- Building a workforce for the future

6:30 am – 7:30 am **JNO Editorial Board Meeting** (JNO editorial board members only)..... San Luis

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57th Frank B. Walsh Symposium
Host: *Duke University/University of Vermont*
Lead Host: *Chantal J. Boisvert, OD, MD*
Host Committee Members:
Mays El-Dairi, MD, Sidney Gospe III, MD; N. Troy Tagg, MD; Philip Skidd, MD
Expert Panel:
Neuroradiologist: Philip R. Chapman, MD
Neuropathologist: John DeWitt, MD, PhD

These sessions will present complex cases that impact the visual pathways and ocular motor systems. The format is a clinicopathologic conference. Clinical cases will be presented by neuro-ophthalmologists with comments by invited experts in neuro-radiology and neuro-pathology. Neuroimaging, laboratory, and surgical pathology data will illustrate clinical points. Cases will be discussed from clinical, anatomic, radiologic, and pathologic aspects with emphasis on diagnosis, pathophysiology, and management.

Upon completion of these sessions, participants should be able to:
(1) Describe the varied clinical presentations of neuro-ophthalmic disease.
(2) Formulate effective diagnostic testing strategies for complex neuro-ophthalmic cases including the use of new diagnostic tests.
(3) Explain the value and limitations of neuropathology and neuroimaging.
(4) Identify newly described neuro-ophthalmic diseases in clinical practice.

7:30 am – 9:30 am **Frank B. Walsh I [2.0 CME]** ..... Tucson Ballroom
Moderators: Mays El-Dairi, MD & N. Troy Tagg, MD

7:30 am – 7:45 am **Welcome/Introduction**, *Heather Moss, MD, PhD, John Chen, MD, PhD, Lindsey De Lott, MD, MS and Chantal J. Boisvert, OD, MD*
7:45 am – 8:05 am **Blasting Through the Walls**, *Tais Estrela, MD*
8:05 am – 8:25 am **Follow Your Gut**, *Ruben Jauregui, MD*
8:25 am – 8:45 am **What Goes Around Comes Around**, *Kathleen Louis-Gray, MD, PhD*
8:45 am – 9:05 am **An Infiltrator in Our Midst**, *Neena Cherayil, MD*
9:05 am – 9:25 am **Behind the Swollen Disc**, *Ari August, BA*
9:25 am – 9:30 am **Wrap Up, Mays El-Dairi**, *MD & N. Troy Tagg, MD*

9:30 am – 9:45 am **Thomas Carlow Distinguished Service Award Presentation**..... Tucson Ballroom
Presented by: Larry Frohman, MD

9:45 am – 10:15 am **Morning Coffee Break with Exhibitors**..... Foyer
Sponsored by Acelyrin

10:15 am – 12:15 pm **Frank B. Walsh II [2.0 CME]** ..... Tucson Ballroom
Moderators: Chantal J. Boisvert, OD, MD & Philip Skidd, MD

10:15 am - 10: 20 am	**Introduction**, *Chantal J. Boisvert, OD, MD & Philip Skidd, MD*
10:20 am – 10:40 am	**Gut is Going On?**, *Danijel Pericic, MD, MS*
10:40 am – 11:00 am	**It's Easy as ABCDCMV**, *Michael Trainer, MD*
11:00 am – 11:20 am	**Cutting Through the Pink Tape**, *Murphy Lu, MD, MBA*
11:20 am – 11:40 am	**Multiple Sclerosis Treatment Goes Viral**, *Sehrish Momin, MBBS*
11:40 am – 12:00 pm	**Under the Surface**, *Betty Situ, MD, MPH*
12:00 pm – 12:15 pm	**Wrap-Up**, *Chantal J. Boisvert, OD, MD & Philip Skidd, MD*

12:15 pm – 12:45 pm **NANOS Business Meeting & JNO Update** (all invited) ..... Tucson Ballroom

12:45 pm – 1:45 pm **Lunch** (provided by NANOS)..... Arizona Ballroom 7

12:45 pm – 1:45 pm **Fellowship Directors Committee Meeting** (lunch provided/committee members only) ..... San Luis

1:00 pm – 3:00 pm **Meet the Poster Author: Descriptive Studies** ..... Arizona Ballroom 1-6

1:00 pm – 2:00 pm	Session I: Authors standing by odd numbered posters
2:00 pm – 3:00 pm	Session II: Authors standing by even numbered posters
3:00 pm – 4:00 pm	Descriptive Posters Break-Down. Remaining descriptive posters not removed by authors by 4:00 pm will be removed by NANOS staff between 4:00 pm and 5:00 pm and will be stored in the registration desk area until the end of the NANOS 51st Annual Meeting.

In this poster session, the first authors of case reports and case series will be available to answer questions about their posters in person. This is a great opportunity to interact with trainees and expand your knowledge about interesting and unusual presentations of neuro-ophthalmologic conditions.

2:45 pm – 3:15 pm **Afternoon Coffee Break with Exhibitors** ..... Foyer
Sponsored by Acelyrin

3:15 pm – 5:15 pm **Frank B. Walsh III [2.0 CME]** ..... Tucson Ballroom
Moderators: Mays Dairi, MD & Sidney Gospe III, MD

3:15 pm – 3:35 pm	**No Worming Out of This One**, *Carter Suryadevara, MD, PhD*
3:35 pm – 3:55 pm	**A Kid, a Fever, and A Whole Lot of Optic Nerve Drama**, *Nitsan Duvdevan-Strier, MD*
3:55 pm – 4:15 pm	**Dancing with "Peggy"**, *Arens Taga, MD*
4:15 pm – 4:35 pm	**TRUE FANS Will Stand By You, No MATTER What!**, *Hyun Jun Kim, MD*
4:35 pm – 4:55 pm	**The Eyes Have It**, *Raghu Mudumbai, MD*
4:55 pm – 5:05pm	**Wrap-up**, *Mays Dairi, MD & Sidney Gospe III, MD*
5:05 pm – 5:15 pm	**Closing Remarks**, *John Chen, MD, PhD and Lindsey De Lott, MD, MS*

5:00 pm – 6:00 pm **Analytical Posters Set Up**..... Arizona Ballroom 1-6
Analytical posters are encouraged to be set up on Sunday during this time so meeting attendees can preview them at Monday breakfast. They can remain on display until Wednesday morning. If presenters are unable to meet these times, we kindly ask all presenters to ensure their posters are displayed prior to the start of the poster session on Monday at 5pm to avoid any disruption. Thank you for your understanding and cooperation!

5:30 pm – 6:00 pm **Walsh Committee Meeting** (committee members only)..... Arizona 8-11

6:00 pm – 7:00 pm **Members-in-Training Reception** (trainees & educators only) ..... Ania Terrace
(bad weather: San Pedro)
All Students, Residents, and Fellows-in-Training, NANOS Board of Directors, Fellowship Directors, Student Clerkship, and Neurology and Ophthalmology Residency Directors are invited to this reception. This event is a great opportunity to network and connect with NANOS leadership and Fellowship Directors.

MONDAY, MARCH 17TH

6:30 am – 7:30 pm **Registration/Help Desk**..... Foyer

6:30 am – 7:30 pm **Exhibit Hours**..... Foyer

6:00 am – 6:45 am **Yoga with the NANOS President** (advanced registration required)..... Ania Lawn

6:30 am – 7:30 am **Breakfast with Exhibitors**.....Arizona Ballroom Foyer

6:30 am – 7:30 am **YONO Breakfast with Experts**..... Arizona Ballroom 7
- Finding a Great Mentor
- What I wish I knew Earlier in My Practice

6:30 am – 7:30 am **Analytical Posters Preview** (no author standby)..... Arizona Ballroom 1-6

6:30 am – 7:30 am **NOVEL/Editorial Board/Curriculum Committee Meeting** (committee members only).....San Pedro

7:30 am – 9:30 am **What's New – Literature Review [2.00 CME]**..... Tucson Ballroom
Moderators: Julie Falardeau, MD & Marc Dinkin, MD

7:30 am – 7:35 am **Introduction**, *Julie Falardeau, MD & Marc Dinkin, MD*
7:35 am – 8:00 am **What's New in Retina?** *Amani Fawzi, MD*
8:00 am – 8:30 am **What's New in Neuro-Vascular Neurology?** *John Paddock, MD*
8:30 am – 9:00 am **What's New in Eye Pain? A Cornea Perspective**, *Anat Galor, MD, MSPH*
9:00 am – 9:30 am **What's New in Neuro-Immunology?** *Fiona Costello, MD, FRCPC*

This session will highlight recent findings from key articles focusing on retinal disorders, corneal neuropathic pain, neuro-vascular disorders, and neuro-immunology. By reviewing and discussing the latest knowledge/research, we aim to enhance clinical practice in neuro-ophthalmology.

Upon completion of this session, participants should be able to:
(1) Review new concepts related to selected retinal diseases, including advancements in imaging modalities.
(2) Discuss new insights into corneal neuropathic pain, including its mechanisms, diagnosis, and management strategies.
(3) Identify best practices for diagnosing and managing neuro-vascular disorders.
(4) Discuss diagnostic criteria, biomarkers, and emerging therapies related to neuro-immunology.

9:30 am – 10:00 am **Morning Coffee Break with Exhibitors**..... Arizona Foyer

10:00 am – 12:00 pm **Scientific Platform Session I [2.0 CME]**..... Tucson Ballroom
Moderators: Stacy Pineles, MD & Samuel Spiegel, MD

10:00 am – 10:15 am **Demographic, Clinical and Imaging Characteristics of Newly Diagnosed Optic Pathway Gliomas Associated with NF1: Results from the International Multicenter NF1-OPG Natural History Study**, *Robert Avery, DO*
10:15 am – 10:30 am **Lack of Clinically Significant Ocular Toxicity in Children Treated with Mitogen-activated Protein Kinase** Kinase **Inhibitors**, *Connor Dallas*
10:30 am – 10:45 am **FALCON: A Prospective Natural History Study in Patients with Optic Atrophy 1-Associated Autosomal Dominant Optic Atrophy**, *Raghu Mudumbai, MD*
10:45 am – 11:00 am **Artificial Intelligence Can Differentiate Causes of Optic Disc Edema Using Unsegmented OCTs**, *David Szanto, MD*
11:00 am – 11:15 am **Flavoprotein Fluorescence Imaging As a Novel Method To Quantify Disease Burden In Optic Disc Drusen**, *Rishita Pujari, MD*
11:15 am – 11:30 am **Time-Driven Activity-Based Costing of Outpatient STAT vs. ED Neuroimaging for Optic Disc Edema**, *Florian H. Guillot, MD*
11:30 am – 11:45 am **Non-Mydriatic Ocular Fundus Imaging on Consecutive Patients Presenting to a General Emergency Department (ED) with Vision Complaints**, *Jessica McHenry, MD*
11:45 am – 12:00 pm **Long-Term Outcomes of Bilateral Injection of Lenadogene Nolparvovec Gene Therapy for Leber Hereditary Optic Neuropathy**, *Nancy Newman, MD*

In the scientific platform sessions, investigators will present results of clinical trials, epidemiologic studies, and basic scienc research that will advance the field of neuro-ophthalmology. The sessions focus on treatments, diagnostic techniques, and mechanistic investigations that have the potential to improve our understanding and management of neuro-ophthalmic conditions.

Upon completion of these sessions, participants should be able to:
1) Describe findings of natural history studies, prospective observational studies, and clinical trials in the field of neuro-ophthalmology.
2) List novel ophthalmic imaging techniques that can be applied to neuro-ophthalmic conditions.
3) Discuss potential applications of genetic testing and artificial intelligence for diagnosis and prognostication of neuro-ophthalmologic disorders.

12:00 pm – 1:00 pm **Lunch (on your own or join the lunch symposium)**

12:00 pm – 1:00 pm **Lambert-Eaton Myasthenic Syndrome (LEMS): An Often-Misdiagnosed Condition with Ophthalmic Signs and Symptoms**..... Arizona Ballroom 7
**This non-CME lunch symposium is an industry-sponsored activity organized by Catalyst Pharmaceuticals, Inc. The NANOS Program Committee was not involved in the planning of this event.*

Moderator/Faculty: TE Lee, MD

This presentation will focus on Lambert-Eaton Myasthenic Syndrome (LEMS) and the clinical signs and symptoms of this neurologic paraneoplastic syndrome. Ophthalmic symptoms that may lead to the recognition of LEMS, differential diagnosis, as well as an FDA-approved treatment option will be discussed.

12:00 pm – 1:00 pm **Exploration of FcRn** Pathway **Inhibition in Thyroid Eye Disease**..... Arizona Ballroom 8-11

*This non-CME lunch symposium is an industry-sponsored activity organized by Argenx and is intended for healthcare professionals only. The NANOS Program Committee was not involved in the planning of this event.

Speakers: Erika F. Brutsaert, MD, Kimberly P. Cockerham, MD, FACS & Vivek R. Patel, MD, FRCSC, Diplomat ABO

TED is a frequently misdiagnosed inflammatory autoimmune disease, characterized by persistent physical manifestations and challenges to patient quality of life. Join us for an engaging symposium to explore the biology behind the burden of TED, with a focus on the role of autoantibodies in its pathophysiology and as a potential therapeutic target. Our expert faculty will also provide an overview of a Phase 3 clinical study investigating efgartigimod alfa in TED. Efgartigimod alfa rHuPH20 is not approved by the FDA for the treatment of patients with TED, as safety and efficacy have not been established.

1:00 pm – 2:30 pm **Member Submitted Symposium: The Cerebellum in Neuro-Ophthalmology [1.5CME]**..... Arizona Ballroom 7
Director: Ali Hamedani, MD, MHS

1:00 pm – 1:05 pm	**Introduction:** *Ali Hamedani, MD, MHS*
1:05 pm – 1:25 pm	**Cerebellar Control of Eye Movement**, Dan Gold, DO
1:25 pm – 1:45 pm	**Management of Visual Symptoms Due to Cerebellar Disease***, Janet Rucker, MD*
1:45 pm – 2:05 pm	**Genetic and Degenerative Cerebellar Ataxias: Diagnosis and Therapeutic Advances***, Ali Hamedani, MD, MHS*
2:05 pm – 2:20 pm	**Retinal and Optic Nerve Disease in Inherited Ataxia Syndromes***, Greg Van Stavern, MD*
2:20 pm – 2:30 pm	**Q&A**

The cerebellum plays a central role in the coordination of eye movement, and many eye movement abnormalities due to cerebellar disease present to the neuro-ophthalmologist for evaluation. Symptoms such as double vision and oscillopsia can be visually disabling, and in addition to treating these symptoms, neuro-ophthalmologists are often tasked with identifying the cause of cerebellar dysfunction, including potential autoimmune, genetic, and degenerative etiologies. This symposium provides a comprehensive overview of neuro-ophthalmic manifestations of cerebellar disease, including the cerebellar control of eye movement, treatment of visual symptoms due to cerebellar disease, approach to diagnosis of cerebellar ataxia, and retinal and optic nerve disease in inherited ataxia syndromes.

Upon completion of this session, participants should be able to:
(1) Describe common eye movement abnormalities associated with cerebellar disease and their mechanisms.
(2) Formulate a diagnostic approach to cerebellar disease presenting to the neuro-ophthalmologist.
(3) Summarize recent advances in the diagnosis and treatment of visual symptoms related to cerebellar ataxia.

1:00 pm – 2:30 pm **Member Submitted Symposium: Difficult Strabismus and the Neuro-Ophthalmologist [1.5 CME]**..... Tucson Ballroom
Director & Moderator: Jason Peragallo, MD; Moderator: Paula Grigorian, MD

1:00 pm – 1:05 pm **Introduction:** *Jason Peragallo, MD*
1:05 pm – 1:23 pm **Patient Selection and Ethics**, *Lauren Ditta, MD*
1:23 pm – 1:41 pm **Oops, I Wish I Hadn't Done That**, *Paul Phillips, MD*
1:41 pm – 1:59 pm **When Small Amounts of Torsion Need Treatment**, *Jonathan Holmes MD*
1:59 pm – 2:17 pm **Strabismus Surgery in the Setting or Orbital and Cavernous Sinus Disease: Pearls and Pitfalls**, *Federico Velez MD & Jason Peragallo, MD*
2:17 pm – 2:30 pm **Q&A**

Neuro-ophthalmologists frequently manage patients with diplopia and strabismus. The neuro-ophthalmologist may treat strabismus medically or surgically or refer the patient to a provider who can provide surgical management. This symposium will address complex situations in strabismus management, including unexpected outcomes, appropriate patient selection for strabismus surgery, management of expectations around strabismus surgery, and management of the patient with torsion or complex orbital and cavernous sinus disease. Familiarity with the management of strabismus resulting from neuro-ophthalmic pathologies is important for improving outcomes and proper counseling of patients. Basic and advanced surgical techniques for treatment of strabismus will be discussed. This symposium is co-sponsored by the American Association for Pediatric Ophthalmology and Strabismus Adult Strabismus Committee.

Upon completion of this session, participants should be able to:
(1) Evaluate patients with strabismus and determine appropriate plans of action to address particular patient needs and situation.
(2) Revise treatment strategies when unexpected outcomes occur.
(3) Distinguish when torsion becomes a barrier to successful strabismus outcomes and apply strategies to overcome this.
(4) Identify risk factors for poor outcomes in complicated orbital and intracranial disease leading to cranial nerve palsies and strabismus.

2:30 pm – 3:00 pm **Afternoon Coffee Break with Exhibitors** ..... Arizona Foyer

3:00 pm – 5:00 pm **Scientific Platform Session II [2.0 CME]** ..... Tucson Ballroom
Moderators: Valerie Biousse, MD & Ali Hamedani, MD, MHS

3:00 pm – 3:15 pm **THRIVE and THRIVE-2 Phase 3 Trials: Efficacy and Safety at 15 Weeks of Veligrotug (VRDN-001), a Full Antagonist Antibody to IGF-1R, in Thyroid Eye Disease (TED)**, *Kimberly P. Cockerham, MD*
3:15 pm – 3:30 pm **Phase 3 Myasthenia Gravis Inebilizumab Trial (MINT): Efficacy and Safety Results in Patients with Generalized MG**, *Richard J. Nowak, MD*
3:30 pm – 3:45 pm **Prevalence and Clinical Features of Spinocerebellar Ataxia 27B in Patients with Idiopathic Downbeat Nystagmus at a Tertiary Care Center**, *Leigh A. Rettenmaier, MD*
3:45 pm – 4:00 pm **Characteristics of Eye Movement Disorders in Adult-Onset Autoimmune and Paraneoplastic Neurological Syndromes**, *Natthapon Rattanathamsakul, MD*
4:00 pm – 4:15 pm **Advancing Otolith Function Assessment: Integrating Artificial Intelligence with Video-Oculography (VOG) for Enhanced Vestibular Diagnosis**, *Krishna N. Mukunda, MD*
4:15 pm – 4:30 pm **Non-Invasive Identification of Alzheimer's Disease Through Ocular Analysis Utilizing Raman Spectroscopic Data Analysis**, *Nitza Goldenberg-Cohen, MD*
4:30 pm – 4:45 pm **In Vivo Transfer of Glial Mitochondria to Retinal Neurons**, *Sidney Gospe, MD, PhD*
4:45 pm – 5:00 pm **Retinal Input to Macaque Superior Colliculus Derives from Branching Axons Projecting to the Lateral Geniculate Nucleus**, *Jonathan C. Horton, MD*

5:00 pm – 7:00 pm **Analytical Studies Poster Reception**..... Arizona Ballroom 1-7
Sponsored by Catalyst Pharmaceuticals, Inc.

5:00 pm – 6:00 pm Session I: Authors standing by odd numbered posters
6:00 pm – 7:00 pm Session II: Authors standing by even numbered posters

In this poster session, first authors of clinical trials, epidemiologic studies, quality improvement projects, and basic science studies will be available to answer questions about their posters in person. Come learn about the cutting-edge research being conducted by your NANOS colleagues! Light hors d'oeuvres buffet and ticketed drink bar included with meeting registration. Guests must purchase tickets for $100 per person online or onsite.

TUESDAY, MARCH 18TH

7:00 am – 7:00 pm **Registration/Help Desk**..... Foyer

6:30 am – 3:45 pm **Exhibit Hours**..... Arizona Foyer

6:30 am – 7:30 am **Fun Run/Walk** (advanced registration required) ..... Starr Circle

Get ready to move and make memories at our 5K Fun Run / Walk! Whether you are a dedicated runner or just here for a good time, this event is all about fun, fitness, and friendship. All abilities are welcome – so bring your enthusiasm, enjoy the scenery, and let's make this 5K unforgettable together! The Fun Run will take place in the Tucson Mountain Park, which is situated adjacent to the JW Marriott Starr Pass Resort. All registered participants will receive a special NANOS water bottle to stay hydrated and keep as a souvenir. Pre-registration required. Deadline: March 17th, 2025, at 7:30 PM.

7:00 am – 8:00 am **Breakfast with Exhibitors**.....Arizona Ballroom Foyer

7:00 am – 8:00 am **YONO Breakfast with Experts**..... Arizona Ballroom 7

- Designing a Career in Surgical Neuro-Ophthalmology
- Academic vs Private Practice vs Hybrid Models of Practice

7:00 am – 8:00 am **Analytical Posters Encore** (no author standby)..... Arizona Ballroom 1-6

7:00 am – 8:00 am **Research Committee Meeting** (committee members only) ..... San Luis

8:00 am – 10:00 am **Global Perspectives: Delivering Neuro-Ophthalmic Care Around the World [2.00]**..... Tucson Ballroom

Moderators: Michael Lee, MD & Steffen Hamann, MD, PhD

8:00 am – 8:05 am **Introduction:** *Michael Lee, MD & Steffen Hamann, MD, PhD*
8:05 am – 8:15 am **Neuro-Ophthalmology Practice and Healthcare Accessibility in Korea**, *Hyun Jin Shin, MD, PhD*
8:15 am – 8:25 am **Neuro-Ophthalmology in the Global South: What Works Where Resources are Limited**, *Umapathi Thirugnanam, MD*
8:25 am – 8:35 am **Delivering Neuro-Ophthalmic Care: The United States Experience**, *Kevin E. Lai, MD*
8:35 am – 8:45 am **Neuro-Ophthalmology in Latin America**, *Alvaro Mejia-Vergara, MD*
8:45 am – 8:55 am **Interdisciplinary Neuro-Ophthalmology and Neuro-Otology Patient Care – the Zürich Model**, *Konrad P. Weber, MD*
8:55 am – 9:05 am **Neuro-Ophthalmology Workforce/Pipeline in South Asia,** *Aastha T. Kapila, MD, DM*
9:05 am – 9:15 am **Innovative Care Models: Group Consultations in IIH and Quality Improvement Implementation**, *Sui H. Wong, MBBS, MD, FRCP*
9:15 am – 9:45 am **Keynote: Workforce Challenges in Ophthalmology and Beyond**, *Stephen McLeod, MD*
9:45 am – 10:00 am **Q&A**

This symposium will highlight how neuro-ophthalmic care varies domestically and internationally. Speakers will discuss the unique challenges and opportunities particular to their region. In addition, the symposium will address specialized clinical care models for idiopathic intracranial hypertension and dizziness. The symposium concludes with a keynote address discussing workforce challenges in ophthalmology by the Chief Executive Officer of the American Academy of Ophthalmology, *Stephen McLeod, MD.*

Upon completion of this session, participants should be able to:
(1) Identify challenges facing ophthalmology in the United States.
(2) Discuss innovative care models for idiopathic intracranial hypertension and dizziness
(3) Describe neuro-ophthalmic care in Latin America, South Korea, and Singapore

10:00 am – 10:05 am **NOVEL Update** ..... Tucson Ballroom

Presented by: Meagan Seay, DO

10:05 am – 10:30 am **Morning Coffee Break with Exhibitors** ..... Arizona Foyer

10:30 am – 12:30 am **Scientific Platform Session III [2.0 CME]** ..... Tucson Ballroom
Moderators: Michael Gilhooley, MB, PhD, FRCOphth & Paula Grigorian, MD

10:30 am – 10:45 am **Pocket Steroids for MOGAD Relapses: a Prospective Study**, *John J. Chen, MD, PhD*
10:45 am – 11:00 am **Prevelence of Multiple Sclerosis, Neuromyelitis Optica, and Myelin Oligodendrocyte Associated Disease in Patients with Optic Neuritis: a United States Large Database Study**, *Alexander S Kwok, MD*
11:00 am –11:15 am **A Phase III Randomized Controlled Trial Of Intravenous Alteplase Initiated Within 4.5 Hours Of Central Retinal Artery Occlusion (CRAO). The THEIA Study**, *Valérie Biousse, MD*
11:15 am – 11:30 am **Is There a Pharmacogenomic Basis to Ethambutol Optic Neuropathy?**, *Shweta Singhal, MD*
11:30 am – 11:45 am **Acute Progression of NAION – Minimal Role of Cardiovascular Risk Factors**, *Zoë R. Williams, MD*
11:45 am – 12:00 pm **Glucocorticoid Induced Adrenal Insufficiency and Elevated Intracranial Pressure: Molecular Mechanisms Underlying CSF Physiology and Rescue Effect**, *Ozair Nissar Sheikh, MD*
12:00 pm – 12:15 pm **Glymphatic Function in Idiopathic Intracranial Hypertension**, *Marc Bouffard, MD*
12:15 am – 12:30 pm **Dysregulation of Lipid Metabolism in Idiopathic Intracranial Hypertension**, *Yin Allison Liu, MD*

12:30 pm – 1:30 pm **Demonstration of Neuro-Op Value Committee Meeting** (committee members only) ..... San Pedro

12:30 pm – 1:30 pm **Lunch** (on your own or join the lunch symposium)

12:30 pm – 1:30 pm **Case Challenges in TED: Applying the Latest Innovations in Practice [1.0 CME]** ..... Arizona 7
* This continuing education activity is provided by Vindico Medical Education and is supported by educational funding provided by Amgen. The NANOS Program Committee was not involved in the organization of this event.

Activity Chair: Andrew G. Lee, MD
Faculty: Madhura Tamhankar, MD, Ana Carolina Victoria, MD

Thyroid eye disease (TED) is a complex autoimmune disorder that can cause eye pain, double vision, and potential vision loss. The diverse presentation often leads to delays in diagnosis and suboptimal treatment. The pathophysiology of TED involves the activation of thyroid-stimulating hormone receptor (TSHR) and insulin-like growth factor-1 receptor (IGF-1R) on orbital fibroblasts, contributing to inflammation and tissue remodeling. The management of TED requires a multidisciplinary approach, addressing both thyroid dysfunction and ocular manifestations. Treatment options range from local and lifestyle interventions for mild cases to glucocorticoids, orbital radiation, and surgery for more severe or stable disease. Biologic therapies, like IGF-1R inhibitors, have demonstrated efficacy in reducing proptosis and inflammation, with emerging therapies targeting B cells, interleukin-6, and mammalian target of rapamycin (mTOR) pathways. Given the evolving treatment landscape, collaboration among ophthalmologists, endocrinologists, and other specialists is essential to optimize patient outcomes. In this CE activity, expert faculty review the utilization of advanced diagnostic methods to improve the differential diagnosis, presenting the latest clinical data to optimize treatment strategies for patients with TED.

Upon successful completion of this activity, participants should be better able to:
(1) Utilize advanced diagnostic methods to improve the timely differential diagnosis of TED in patients.
(2) Apply the latest clinical data to optimize treatment strategies for patients with TED, including current and emerging therapies.

1:30 pm – 3:00 pm **Member Submitted Symposium: How to Implement a Non-Mydriatic Retinal Camera in General Emergency Departments and in Neurology Clinics [1.5 CME]** ..... Tucson Ballroom
Director: Valerie Biousse, MD
Speakers: Aubrey Gilbert, MD, Nancy Newman, MD, Oana Dumitrascu, MD, Mung Yan (Amy) Lin, MD, Kevin Yan, MD

This symposium will discuss the implementation of non-mydriatic fundus cameras (color and OCT) in general Emergency Departments (ED) and Neurology Clinics. This will be an interactive session moderated by speakers who have experience with such implementation.

Upon completion of this session, participants should be able to:
(1) Summarize the rationale supporting the need to deploy non-mydriatic ocular fundus cameras in non-ophthalmic settings such as Emergency Departments (ED) and Neurology Clinics where eye care providers are not readily available.
(2) Discuss the advantages and disadvantages of various types of cameras in the ED.
(3) Review potential outcome measures to assess the impact of non-mydriatic retinal cameras in EDs.

1:30 pm – 3:00 pm **Member Submitted Symposium: Teaching Does Not Equal Learning! How to Become a Master Educator [1.5 CME]** ..... Arizona Ballroom 7
Director: Andrew Melson, MD

1:30 pm – 1:35 pm	**Introduction***, Andrew Melson, MD*
1:35 pm – 1:50 pm	**A Primer on Adult Learning Theory as It Pertains to Medical Education***, Nailyn Rasool, MD*
1:50 pm – 2:10 pm	**Giving Good Feedback and Developing Faculty:** *Karl Golnik, MD, MEd*
2:10 pm – 2:25 pm	**How to Manage the Struggling Learner:** *Andrew Melson, MD*
2:25 pm – 2:45 pm	**Personal Efficiency Strategies to Make Time for Teaching:** *Andrew G. Lee, MD*
2:45 pm – 3:00 pm	**Q&A**

In this symposium, we aim to provide our colleagues with new skills and techniques to educate a variety of learners in response to the changing culture and dynamics of medical education. We will also focus on practical strategies to provide high quality feedback, optimize personal efficiency and learn to manage struggling learnings. We will provide links to established resources for further learning opportunities and ongoing faculty development. We hope to empower our colleagues to become master educators, a critical skill by which we bring excitement to the field of neuro-ophthalmology and inspire the next generation of learners and young physicians to choose our incredible subspecialty as their career of choice.

Upon completion of this session, participants should be able to:
(1) Describe fundamental adult learning theory and understand its relevance to medical education, particularly the value of a flipped classroom model.
(2) Demonstrate improved ability to provide meaningful, actionable feedback/evaluation to learners and similarly utilize existing resources to appraise one's own mastery of teaching.
(3) Identify and manage struggling learners.
(4) Employ practice management and personal efficiency strategies to optimize teaching opportunities and prepare for academic promotion.

3:00 pm – 3:30 pm **Afternoon Coffee Break with Exhibitors** ..... Arizona Foyer

3:30 pm – 5:30 pm **Shaping the Future of Neuro-Ophthalmology [2.0 CME]** ..... Tucson Ballroom

3:30 pm – 3:35pm	**Welcome & Introduction***, Amanda Henderson, MD*
3:35 pm – 4:30 pm	**Developing Our Workforce** *Moderators: Sangeeta Khanna, MD & Nailyn Rasool, MD, FRCPC, FRCSC* *Panelists: Stephen McLeod, MD, Aimee Szewka, MD, Steven Galetta, MD & Ore Ofe O. Adesina, MD*
4:30 pm – 5:25 pm	**Developing Our Field** *Moderators: Barbara Yates, MD & Andrew Melson, MD* *Panelists: Stephen McLeod, MD, Mark Moster, MD, Larry Frohman, MD & Courtney Francis, MD*
5:25 pm – 5:30 pm.	**Wrap Up***, Amanda Henderson, MD*

In this symposium, we will discuss key issues pertinent to pipeline, leadership and career development important for recruitment and retention of neuro-ophthalmologists. We will explore avenues for advocacy that each of us individually, and as a professional society can take to improve key areas of concern in our field. We are joined by a special guest, Stephen McLeod, CEO of the AAO, who will provide organizational insight into leadership opportunities and advocacy for neuro-ophthalmology.

Upon completion of this session, participants should be able to:
(1) Summarize tools for inclusive leadership development for all neuro-ophthalmologists of diverse backgrounds and interests.
(2) Explain opportunities for career development and inspiration for recruitment to improve the "neuro-ophthalmology pipeline".
(3) Discuss the key issues impacting neuro-ophthalmology and how you can be a part of the solution.

5:30 pm – 6:30 pm **Networking Reception** ..... Ania Terrace

Meet someone new and discover ways to get involved with NANOS and learn more about the world of neuro-ophthalmology, all in a relaxed, welcoming atmosphere. Drink tickets will be accepted, and cash bar will be available.

6:30 pm – 7:30 pm **Abstract Committee Meeting** (committee members only) ..... San Luis

WEDNESDAY, MARCH 19TH

7:00 am – 5:00 pm **Registration/Help Desk** ..... Foyer

7:00 am – 12:30 pm **Exhibit Hours** ..... Foyer

6:00 am – 6:45 am **Yoga with NANOS President** (advanced registration required) ..... Ania Lawn

7:00 am – 8:00 am **Breakfast with Exhibitors** ..... Arizona Ballroom Foyer

7:00 am – 8:00 am **YONO Breakfast with Experts** ..... Arizona Ballroom 7
- How to Build a Thriving Practice

7:00 am – 8:00 am **Analytical Posters Encore** (no authors standby) ..... Arizona Ballroom 1-6

7:00 am – 8:00 am **International Relations Committee Meeting** (committee members only) ..... San Pedro

7:00 am – 8:00 am **DEI Committee Meeting** (committee members only) ..... San Luis

8:00 am – 11:30 am **Analytical Posters Break-Down** ..... Arizona Ballroom 1-6
All analytical posters not previously removed by authors will be removed by NANOS staff between 11:30 am 12:30 pm and will be stored in the registration desk area until the end of the NANOS 51st Annual Meeting.

8:00 am – 10:00 am **Insight: The Science and Clinical Practice of Supporting Patients Through Vision Loss; Therapy When There is No Cure [2.0 CME]** ..... Tucson Ballroom
Moderators: Melissa Ko, MD, MBA, FAAN & Guy Jirawuthiworavong, MD, MA

8:00 am – 8:05 am	**Introduction**, *Melissa Ko, MD, MBA, FAAN & Guy Jirawuthiworavong, MD, MA*
8:05 am – 8:35 am	**Integrating Palliative Care Into Neuro-Ophthalmology Practice**, *Benzi Kluger, MD, MBA, FAAN*
8:35 am – 9:00 am	**Neuroscience of Compassion, (Integrating Grief & Loss)**, *Agnes Wong, MD, PhD*
9:00 am – 9:25 am	**Adult Case Study (Video) With Panel Discussion, Case introduction:** *Jeffrey Gluckstein, MD*
9:25 am – 9:50 am	**Pediatric Case Study With Parent Interview Followed by Panel Discussion, Case Introduction:** *Sam Spiegel, MD*
9:50 am – 10:00 am	**Q&A**

As neuro-ophthalmologists, we are frequently confronted with diagnosing and communicating to our patients the difficult news that their vision loss is irreversible and without cure. Patients seek our compassionate support as they journey through grief and loss of their visual impairment/blindness. Our expert panel comprised of a neuro-ophthalmologist/scientist/chaplain and a neuro palliative care physician will respectively provide didactics on the neuroscience of grief/loss along with compassion/mental training, the integration of palliative care into neuro-ophthalmology and the practical tools we can employ in clinic when caring for a distressed patient practice. This will be followed by video and live interviews with patients for our expert panel to discuss and to illustrate the principles of neuro palliative care in the neuro-ophthalmic setting.

Upon completion of this session, participants should be able to:
(1) Explain the neuroscience behind compassion and mental training.
(2) Identify patient distress and employ clinical tools to approach the distressed patient.
(3) Apply and integrate principles of neuro palliative care into neuro-ophthalmic practice.

10:00 am – 10:30 am **Morning Coffee Break with Exhibitors** ..... Arizona Foyer

10:30 am – 12:00 pm **Neuro-Ophthalmology Bowl [1.5 CME]** ..... Tucson Ballroom
Moderators: Sashank Prasad, MD & Collin McClelland, MD
Competitors: Mary Labowsky, MD, Andrew Fischer, MD, Nelli Galoyan, MD, Evan Jameyfield, MD, Michael Carper, MD, Brian Chou, MD, MA, Michael Gilhooley, MB, PhD, FRCOphth & Tatiana Deveney, MD

This session is a fun, interactive 'quiz show' format where 2 teams of contestants will test their diagnostic acumen over a series of challenging neuro-ophthalmological case presentations. In addition, the full audience will also be able to play along to see who lands at the top of the leader board. Interesting, practical teaching points will accompany each case to solidify important clinical concepts and take-home messages.

Upon completion of this session, participants should be able to:
(1) Identify important details from patient histories, examinations, and diagnostic testing to make uncommon neuro-ophthalmological diagnoses.
(2) Review knowledge about the historical description, current scientific understanding, and emerging treatment options for these conditions.

12:00 pm – 12:30 pm **Jacobson Lecture: From Castro to Quantum Mechanics: A Tunnel of Love [0.5 CME]** .... Tucson Ballroom
Alfredo A. Sadun, MD, PhD (introduction by Deborah Friedman, MD)

12:30 pm – 1:30 pm **Lunch** (on your own)

12:30 pm – 1:30 pm **Optic Disc Drusen Study (ODDS) Consortium Meeting**..... San Luis

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Skills Sessions (limited capacity)

We are thrilled to bring you two unique and engaging skills sessions at this year's NANOS Annual Meeting! These interactive sessions are designed to provide hands-on learning opportunities you won't want to miss.

To accommodate as many attendees as possible, each session will be offered twice. Admission to these interactive skills sessions will be first come first serve. Be sure to arrive early to secure your place! **Spaces are Limited!**

	Rooms: Arizona 8-11 & Tucson B & D	**Room: Arizona 7**
1:30 pm – 3:00 pm	Neuro-otology meets neuro-ophthalmology **[1.5 CME]**	Chemodenervation meets neuro-ophthalmology **[1.5 CME]**
3:15 pm – 4:45 pm	Neuro-otology encore **[1.5 CME]**	Chemodenervation encore **[1.5 CME]**

1:30 pm – 3:00 pm & 3:15 pm – 4:45 pm **Skills Session: Neuro-Otology meets Neuro-Ophthalmology [1.5 CME]**..... **see above**
Moderators: Dan Gold, DO, Konrad Weber, MD & João Lemos MD, PhD

Station 1 (15 min): **OKN/Saccades***, David Hale, MD & Caroline Froment, MD, PhD*
Station 2 (15 min): **Nystagmus:** *Jorge Kattah, MD & Shannon Beres, MD*
Station 3 (15 min): **Saccadic Intrusions***, Janet Rucker, MD*
Station 4 (15 min): **Pursuit, VORS, vVOR***, Anthony Brune, DO & Scott Grossman, MD*
Station 5 (15 min): **VOR/vHIT,** *Konrad Weber, MD, Kristen Steenerson, MD & Roksolyana Tourkevich, MD*
Station 6 (15 min): **Skew Deviation,** *João Lemos, MD, PhD, David E. Newman-Toker, MD, PhD, Dan Gold, DO*

This will be a predominantly hands-on clinical skills transfer course, emphasizing the importance of the ocular motor examination in neuro-ophthalmology. This course will cover how to properly perform eye movement examination maneuvers, as well as their Interpretation. Participants will be assigned a starting station upon arrival and will rotate through each station during the session.

Upon completion of this session, participants should be able to:
(1) List the essential components of the eye movement examination.
(2) Apply the eye movement examination efficiently and effectively in patients with and without ocular motor dysfunction.
(3) Interpret the eye movement examination to distinguish normal from abnormal, and to assist with localization.

1:30 pm – 3:00 pm & 3:15 pm – 4:45 pm **Skills Session: Chemodenervation meets Neuro-ophthalmology [1.5 CME]** ..... **see above**
Moderators: Lindsey DeLott, MD, MS & Billi Wallace, MD

1:30 pm – 1:45 pm & 3:15 pm – 3:30 pm **Overview**, *Wayne Cornblath, MD*
1:45 pm – 1:55 pm & 3:30 pm – 3:40 pm **Chemodenervation for Headache**, *Judith Warner, MD*
1:55 pm – 2:05 pm & 3:40 pm – 3:50 pm **Chemodenervation for Facial Spasms**, *Neil Miller, MD*
2:05 pm – 2:15 pm & 3:50 pm – 4:00 pm **Other Applications of Chemodenervation**, *Kimberly Cockerham, MD*
2:15 pm – 2:35 pm & 4:00 pm – 4:20 pm **Break out Session A, B or C (participant's choice)**
2:40 pm – 3:00 pm & 4:25 pm – 4:45 pm **Break out Session A, B, or C (participant's choice)**

Break out session A: Injection Practice (facial spasm): Hands on practice for those interested in adding chemodenervation procedures for facial spasms to their practice and those looking to enhance their injection skills alongside other learners.
Faculty: Kimberly Cockerham, MD, Prem Subramanian, MD, PhD, Ore Ofe O. Adesina, MD, Marc Levin, MD, PhD, Peter Quiros, MD, Neil Miller, MD, FACS, Evan Schloss, MD, Michelle Riggins, MD, Kevin Lai, MD, Susan Mollan, MBcHB, FRCOphth

Break out session B: Injection Site Identification (migraine): Hands on practice for those interested in adding chemodenervation procedures for migraine to their practice and those looking to enhance their injection skills alongside other learners.
Faculty: Ben Frishberg, MD, Milena Stosic, MD, Lindsey Delott, MD, MS, Judith Warner, MD, Stacy Smith, MD, Deborah Friedman, MD

Break out session C: Advanced Discussion: For participants that want to discuss complex issues (e.g., dose titrations, handling side effects, etc.) or practice other other chemodenervation procedures (e.g., strabismus)
Faculty: Billie Wallace, MD, Wayne Cornblath, MD, Scott Forman, MD

Chemodenervation Meets Neuro-Ophthalmology is a hybrid didactic and hands-on skills transfer session. The didactic portion will discuss available toxins and techniques for several common and less common neuro-ophthalmic conditions including migraine, facial dystonias/spasms, and strabismus. The hands-on portion will allow participants to work in small groups to practice injection techniques on provided models and to participate in advanced discussion for less common toxin applications under the guidance of experienced group leaders. This course is designed for those who are interested in adding chemodenervation procedures to their clinical practice as well as those who have experience with chemodenervation but hope to further enhance their skills.

Upon completion of this session, participants should be able to:
(1) Discuss available toxins, appropriate injection preparation, and billing.
(2) Describe injection techniques, documentation, outcomes, and potential complications of toxin injection for facial spasm, headache/migraine, and other less common neuro-ophthalmic applications.
(3) Objective 3 Learners will identify injection sites, demonstrate proper injection techniques, and discuss less common applications in small group skills transfer sessions.

5:00 pm – 6:00 pm **Consortium of Pediatric Neuro-Ophthalmologists (CPNO) Meeting**.....San Luis

6:30 pm – 12:00 am **Trio of Cultures Banquet, Entertainment and After Party**

6:30 pm	Arrival, Networking, Drinks..... Starr Circle
7:00 pm	Dinner
7:45 pm	Trio of Cultures Show - Native American Hoop Dance
8:00 pm	Welcome by NANOS President
8:15 pm	Trio of Cultures Show - Ballet Folklorico
8:30 pm	Abstract Awards and Announcements
8:45 pm	Trio of Cultures Show - Loop Rawlins - Trick Roper
10:00 pm	After Party with a DJ..... Arizona Ballroom 7

Join us for an unforgettable evening to enjoy a delicious dinner and "Trio of Cultures" entertainment under the stars. After dinner, keep the night alive with dancing from 10:00 pm until midnight! Included with meeting registration. Guest tickets for the banquet and afterparty are available for purchase at $175 and children's tickets are available for $75 with online registration or onsite at the NANOS Registration Desk.

THURSDAY, MARCH 20TH

7:00 am – 1:00 pm **Registration/Help Desk**..... Foyer

7:00 am – 8:00 am **Breakfast**..... Arizona Ballroom 7

8:00 am – 10:00 am **Treatments Outside the Box [2.0 CME]**..... Tucson Ballroom
Moderators: Vivek Patel, MD & Zoe Williams, MD

8:00 am – 8:05 am	**Introduction**, *Vivek Patel, MD & Zoe Williams, MD*
8:05 am – 8:25 am	**Will Food Help Me?** *Rudrani Banik, MD*
8:25 pm – 8:45 am	**Will a Procedure Help Me?** *Bradley Katz, MD, PhD*
8:45 am – 9:05 am	**Will Glasses Help Me?** *Kimberly Winges, MD*
9:05 am – 9:25 am	**Will Eye Drops Help Me?** *Jane Bailey, MD*
9:25 am – 9:45 am	**Will Devices Help Me?** *Joseph Rizzo, MD*
9:35 am – 10:00 am	**Q&A**

The over-arching goal of this session is to highlight potential treatments and strategies to address common questions every neuro-ophthalmologist encounters in clinical practice. Relying on the expertise of our speakers, our moderators will lead a discussion in multiple areas including dietary factors relevant to neuro-ophthalmic conditions, the role of dietary supplements, potentially helpful in-office and surgical procedures such as botulinum toxin, therapeutic injections, vision therapy, and stem cell transplantation, optical strategies to correct diplopia, improve compensation for homonymous visual field loss, and address photophobia, topical agents for the treatment of ocular surface disorders resulting in eye pain, monocular diplopia, visual blurring, ptosis, presbyopia and anisocoria and potentially promising strategies for functional visual restoration using assistive devices and artificial vision technologies.

Upon completion of this session, participants should be able to:
(1) Evaluate evidence-based dietary changes to reduce vision loss, inflammation, and cognitive impairment.
(2) Discuss the role of stem cell transplantation and vision therapy.
(3) Describe optical techniques for managing patients with binocular vision disorders, nystagmus, and visual field loss.
(4) Describe pharmacologic options to address common clinical presentations including ptosis, anisocoria and presbyopia.

10:00 am – 10:30 am **Morning Coffee Break**..... Arizona Foyer

10:30 am – 12:30 pm **Neuro-Ophthalmology Problems From Childhood to Adulthood [2.0 CME]** ..... Tucson Ballroom
Moderators: Melinda Chang, MD & Jason Peragallo, MD

10:30 am – 10:35 am	**Introduction**, *Melinda Chang, MD & Jason Peragallo, MD*
10:35 am – 11:00 am	**Optic Pathways Gliomas**, *Robert Avery, DO*
11:00 am – 11:30 am	**Cortical Visual impairment**, *Gena Heidary, MD, PhD*
11:30 am – 12:00 pm	**Optic Nerve Hypoplasia + Inherited Optic Neuropathies**, *Mark Borchert, MD*
10:00 am – 11:00 am	**Amblyopia**, *Eric D. Gaier, MD, PhD*

Many pediatric neuro-ophthalmologic conditions persist as patients age, and considerations in adulthood may differ from childhood. In this session, we will discuss the diagnosis, management, and complications of optic pathway gliomas, cerebral/cortical visual impairment (CVI), congenital optic neuropathies, and amblyopia in various stages of life.

Upon completion of this session, participants should be able to:
(1) List the endocrinopathies that are associated with optic nerve hypoplasia and the age range at which endocrine testing is indicated.
(2) Describe the differences between cerebral/cortical visual impairment (CVI) in children and cortical blindness in adults.
(3) Discuss the potential advantages of binocular treatments for amblyopia.

See you at the 52nd NANOS Annual Meeting at the Boston Marriott Copley Place in Boston, MA, March 20-24th, 2026!