

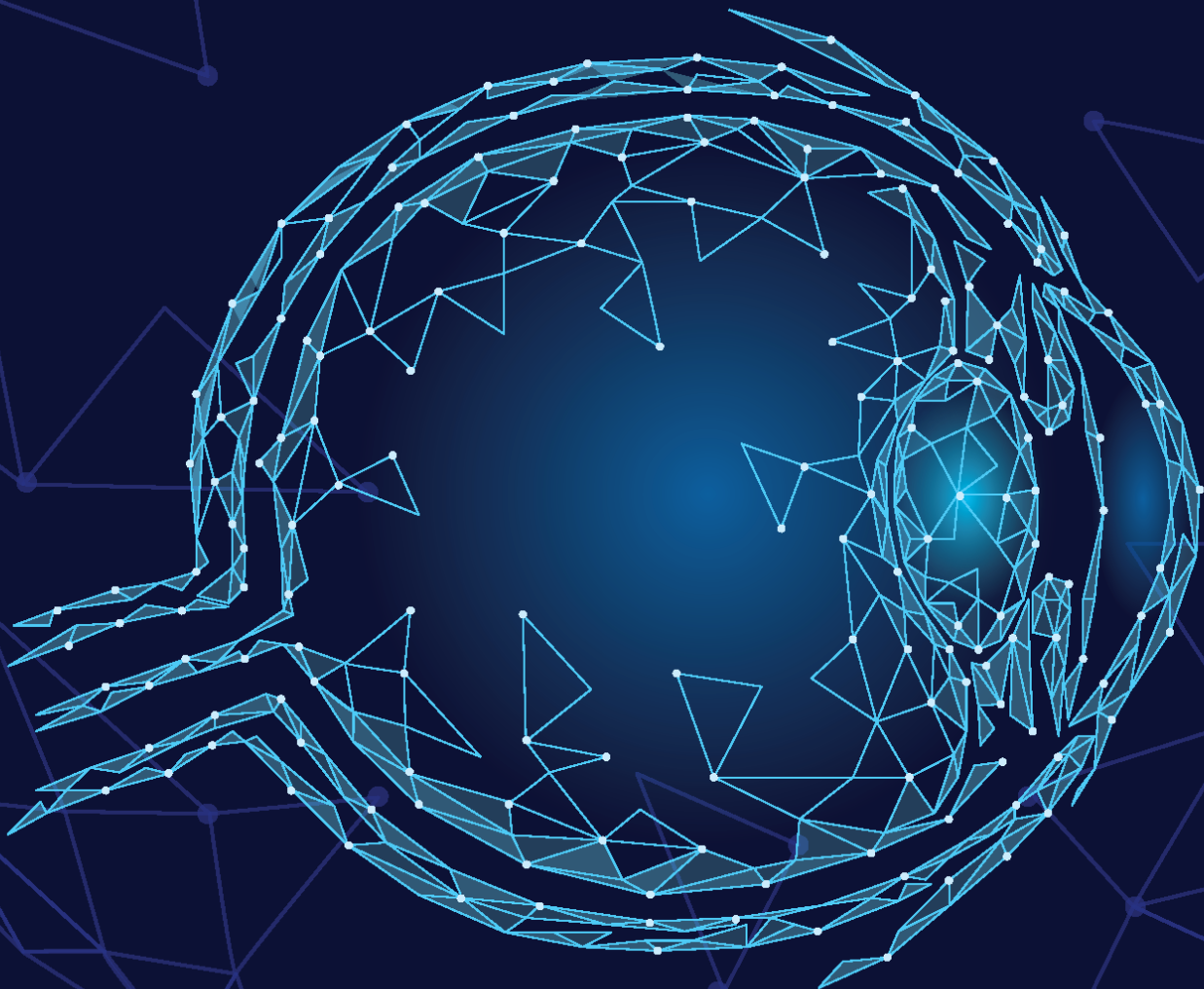
# PROGRAM OVERVIEW

2021

47<sup>TH</sup> ANNUAL MEETING

# NANOS

VIRTUAL • FEBRUARY 20-23



NORTH AMERICAN NEURO-OPHTHALMOLOGY SOCIETY

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North American Neuro-Ophthalmology Society

# 47th Annual Meeting

February 20-23, 2021

VIRTUAL

**All times listed in Mountain Standard Time (MST).**

## On-Demand

**1 hour**

**Neuro-Radiology Case Review: Challenge Yourself with the Imaging Ddx [1.0 CME], Nancy Fischbein, MD**

This session is intended to be a supplemental case-based review of neuro-radiology pearls and pitfalls as they relate to imaging in neuro-ophthalmology. A particular focus of this session will be understanding the typical imaging sequences used in imaging of neuro-ophthalmological disorders, as well as gaining understanding of how certain newer imaging modalities (notably arterial spin label perfusion imaging) might be applied. As cases are presented, a focus will also be on working through an appropriate differential diagnosis and understanding why or why not a particular consideration in the differential diagnosis is a good fit.

Upon completion of this session, participants should be able to: (1) describe role of perfusion imaging in ophthalmology, (2) review physiology behind ASL perfusion imaging, and (3) utilize information from ASL perfusion in clinical decision-making.

## Saturday, February 20<sup>th</sup>

**All are encouraged to do yoga, view posters, on-demand content, and visit the exhibit hall at their leisure.**

**7:00 am – 7:45 am**

**International Relations Committee Meeting**

**8:00 am – 8:04 am**

**Welcome and Introduction, Valerie Biousse, MD and Prem S. Subramanian, MD, PhD**

**8:04 am – 9:15 am**

**Tele-Neuro-Ophthalmology: Updates and Future Implications [1.25 CME]**

*Moderators: Melissa W. Ko, MD, FAAN, CPE and Kevin Lai, MD*

Telemedicine in neuro-ophthalmology has exponentially grown in adoption in the past year, largely due to the unprecedented changes to medical care necessitated by the COVID-19 pandemic. In this expert panel presentation with Q&A, we will review how telemedicine has impacted neuro-ophthalmology in the COVID era, reflect on the experiences of advantages and pitfalls of using telemedicine for the evaluation and management of neuro-ophthalmic disease, offer practical strategies and resources for

the implementation of telemedicine, update attendees on billing and coding in telemedicine, and explore future applications of telemedicine in neuro-ophthalmic care.

Upon completion of this session, participants should be able to: (1) enumerate advantages and pitfalls to telemedicine in clinical practice, and (2) demonstrate clinical examination techniques in telemedicine, and (3) envision practical methods of incorporating telemedicine into individual neuro-ophthalmology practice.

8:04 am – 8:16 am	<b>What Did We Learn From COVID-19? Tele-Neuro-Ophthalmology Adoption During A Pandemic</b> , <i>Melissa W. Ko, MD, FAAN, CPE</i>
8:16 am – 8:26 am	<b>Telemedicine as a Practice Model</b> , <i>Aubrey Gilbert, MD, PhD</i>
8:26 am – 8:40 am	<b>Practical Telemedicine: Tips for Video Visits</b> , <i>Heather E. Moss, MD, PhD</i>
8:40 am – 8:52 am	<b>Practical Telemedicine: Validated Mobile Apps</b> , <i>Linus Sun, MD, PhD</i>
8:52 am – 9:02 am	<b>Coding Updates in Telemedicine Use</b> , <i>Kevin Lai, MD</i>
9:02 am – 9:15 am	<b>Panel discussion / Q&amp;A session (LIVE with chat)</b>
<b>9:15 am – 9:45 am</b>	<b>Break</b>
<b>9:45 am – 11:45 am</b>	<b>Frank B. Walsh (I) [2.0 CME]</b>

Host: Stanford University- *Y. Joyce Liao, MD, PhD*

Committee members: *Shannon Beres, MD and Heather E. Moss, MD, PhD*

Neuro-radiologist: *Nancy Fischbein, MD*

Neuro-pathologist: *Raymond Sobel, MD*

Ophthalmic-Genetics: *Vinit B. Mahajan, MD, PhD*

This session is designed to present complex neuro-ophthalmic cases that impact the human visual pathways and ocular motor systems. The format is a clinicopathologic conference. Clinical cases will be presented by neuro-ophthalmologists with comments by a neuroradiologist, neuropathologist and other selected experts. Neuroimaging, laboratory and surgical pathology data will help illustrate clinical point. Cases will be discussed from clinical, anatomic, radiologic and pathologic aspects with emphasis on diagnosis, pathophysiology and management.

Upon completion of this session, participants should be able to: (1) recognize the varied presentations of neuro-ophthalmic disease, (2) correlate the anatomic localization and histopathologic appearance with the clinical presentations, (3) use radiologic procedures in diagnosis effectively (4) recognize both the value and limitations of neuropathology, and (5) discuss newly described diseases and their connection to neuro-ophthalmology.

9:45 am – 10:00 am	<b>Welcome/Introduction</b>
10:00 am – 10:20 am	<b>A 4-Year Wait</b> , <i>Dmitry Balian, MD</i>
10:20 am – 10:40 am	<b>Never Too Young or Too Old</b> , <i>Bart K. Chwalisz, MD</i>
10:40 am – 11:00 am	<b>"X" Marks the Spot</b> , <i>Luis Andre Leal Ferman, MD, FRCPC</i>
11:00 am – 11:20 am	<b>Sometimes a Biopsy is Best</b> , <i>Kevin D. Chodnicki, MD</i>
11:20 am – 11:40 am	<b>Frizzle Frazzled</b> , <i>Eric D. Gaier, MD, PhD</i>
11:40 am – 11:45 am	<b>Wrap-Up</b>
<b>11:45 am – 12:15 pm</b>	<b>Break</b>

<b>12:15 pm – 2:10 pm</b>	<b>Frank B. Walsh (II) [2.0 CME]</b>
12:15 pm – 12:35 pm	<b>A Definite Maybe, Raghu C. Mudumbai, MD</b>
12:35 pm – 12:55 pm	<b>A Small Leak Will Sink a Great Ship, Konstantinos Douglas, MD, DVM, MBA</b>
12:55 pm – 1:15 pm	<b>Oh My GAD!! Something Else? Olwen C. Murphy, MBBCh, MRCPi</b>
1:15 pm – 1:35 pm	<b>Orbiting a Diagnosis, Daniel L. Liebman, MD, MBA</b>
1:35 pm – 1:55 pm	<b>Gone but Not Forgotten, Jonathan A. Micieli, MD</b>
1:55 pm – 2:05 pm	<b>Wrap Up</b>
2:05 pm – 2:10 pm	<b>Closing</b>
<b>3:00 pm – 4:00 pm</b>	<b>Walsh Committee Meeting</b>
<b>4:30 pm – 5:30 pm</b>	<b>Poster Chat Session I (Posters 1-68)</b>
<b>5:30 pm – 6:00 pm</b>	<b>Business Meeting</b>
<b>6:00 pm – 7:00 pm</b>	<b>Welcome Reception</b>

Join us in Gather Town for an interactive reception. Go to the Auditorium and click “Join” next to the Welcome Reception. Gather Town is a video-calling space that lets multiple people hold separate conversations in parallel, walking in and out of those conversations just as easily as you would at an in-person reception. We look forward to seeing you there!

## **Sunday, February 21<sup>st</sup>**

**All are encouraged to do yoga, view posters, on-demand content, and visit the exhibit hall at their leisure.**

<b>8:00 am – 10:00 am</b>	<b>Infectious Diseases in Neuro-Ophthalmology: It’s Not Just COVID-19 [2.0 CME]</b> <i>Moderators: Jeffrey Bennett, MD, PhD and Beau Bruce, MD, PhD</i>
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A variety of infectious agents cause important neuro-ophthalmic disease. Some are old favorites, like syphilis, some are novel and emerging, like COVID-19, and some could even be used as weapons, like botulism. Infectious diseases are commonly on the differential diagnosis with inflammatory etiologies that are best treated with immunosuppressive agents, complicating potential management plans.

Upon completion of this session, participants should be able to: (1) describe the features of multiple neuro-ophthalmic diseases caused by infectious agents, (2) describe management strategies that involve the use of immunosuppressive agents in the setting of known or possible infectious disease, and (3) describe national surveillance and bioterrorism preparedness for botulism.

8:00 am – 8:23 am	<b>COVID-19 and the Eye and Brain, Marc Dinkin, MD</b>
8:23 am – 8:42 am	<b>Immunosuppressive Therapy in the Setting of Infectious Risk, Lindsey De Lott, MD, MS</b>
8:42 am – 9:01 am	<b>Infectious Optic Neuropathies: What Should I do Differently? Lynn Gordon, MD, PhD</b>
9:01 am – 9:20 am	<b>The Rise of Old Diseases: Syphilis and More, Guy</b>

9:20 am – 9:40 am	<i>Jirawuthiworavong, MD, MA</i> <b>Preparing for the Worst: Botulism - National Surveillance, Emergency Response, and Bioterrorism Preparedness, Beau Bruce, MD, PhD</b>
9:40 am – 10:00 am	<b>Q&amp;A</b>
<b>10:00 am – 10:15 am</b>	<b>Break</b>
<b>10:15 am – 12:15 pm</b>	<b>Journal Club: What You Need to Know Now! [2.0 CME]</b> <i>Moderators: Sophia Chung, MD and Kimberly Wings, MD</i>
<p>Everchanging technology affords the continued opportunity to new approaches to evaluation, diagnosis, and treatment strategies. Furthermore, application of artificial intelligence (AI) on big data is one of the most influential revolutions in information technology. In this symposium, we will review current applications of AI in neuro-ophthalmology, advances and diagnostic utility of OCTA, new diagnostic techniques for optic disc drusen, and conclude with novel and current management of two critically important neuro-ophthalmic conditions, NMO and IIH.</p> <p>Upon completion of this session, participants should be able to: (1) define AI in neuro-ophthalmology, current use, and future impact to create algorithms and make clinical decisions from individual practices to global medicine, (2) discuss clinical applications of OCTA in neuro-ophthalmology, (3) Identify new advances in the diagnosis of optic disc drusen, (4) describe new immunotherapies in NMO, and (5) summarize and evaluate new medical and surgical treatments in IIH.</p>	
10:15 am – 10:30 am	<b>OCTA: What Can it Tell Me and How to Use It, Anthony Arnold, MD</b>
10:30 am – 10:45 am	<b>AI in Neuro-Ophthalmology: What the Future Holds, Dan Milea, MD, PhD</b>
10:45 am – 10:53 am	<b>Artificial Intelligence Reveals Disease-Specific Quantifiable Visual Field Defects in Idiopathic Intracranial Hypertension, Hiten A. Doshi, BS</b>
10:53 am – 11:08 am	<b>Newest Immunotherapies in NMO: Which One to Choose? Jeffrey Bennett, MD, PhD</b>
11:08 am – 11:16 am	<b>Archetypal Analysis Identifies Quantifiable Visual Field Loss Patterns and Predictors of Recovery in Optic Neuritis, Elena Solli, MD</b>
11:16 am – 11:31 am	<b>Treatment of Intracranial Hypertension: New Options or Not? Julie Falardeau, MD</b>
11:31 am – 11:39 am	<b>Effect of Prostaglandin Analogs on Cerebrospinal Fluid Reabsorption Via Nasal Mucosa, Prem S. Subramanian, MD, PhD</b>
11:39 am – 11:54 am	<b>Optic Disc Drusen: Insights on Diagnosis, Clare Fraser, FRANZCO</b>
11:54 am – 12:15 pm	<b>Q&amp;A</b>
<b>1:00 pm – 2:00 pm</b>	<b>Poster Chat Session II (Posters 69-106)</b>
<b>2:00 pm – 2:50 pm</b>	<b>TEPEZZA® (teprotumumab-trbw): A Breakthrough Medicine,* Kimberly Cockerham, MD, FACS</b>
	*This symposium is organized by Horizon Therapeutics.

Please join us for a virtual discussion on TED and Tepezza. This presentation is intended for US-based healthcare professionals.

**3:30 pm – 4:30 pm**                      **Fellowship Committee Meeting**  
**6:00 pm – 7:00 pm**                      **Virtual Wine Tasting with Chat**

Join us as NANOS members lead us through tastings of some of their favorite wines and regions. We'll enjoy a selection of sparkling, white and red wines and learn about the different varietals and regions.

## **Monday, February 22<sup>nd</sup>**

**All are encouraged to do yoga, view posters, on-demand content, and visit the exhibit hall at their leisure.**

**7:30 am – 8:30 am**                      **Poster Chat Session III (Posters 107-148)**  
**8:30 am – 10:00 am**                      **Scientific Platform Session I [1.5 CME]**  
*Moderators: Nagham Al-Zubidi, MD and Ruth Huna-Baron, MD*

8:30 am – 8:38 am	<b>Two-Year Follow-Up of the Prospective Outcomes Study of Pediatric Optic Neuritis, Stacy L. Pineles, MD</b>
8:38 am – 8:46 am	<b>The MICK (Mobile Integrated Cognitive Kit) App: Digital Rapid Automated Naming for Diagnosis of mTBI, Scott N. Grossman, MD</b>
8:46 am – 8:54 am	<b>Teprotumumab Efficacy in Retreatment and Longer-Term Thyroid Eye Disease: OPTIC-X Study Results, Raymond S. Douglas, MD, PhD</b>
8:54 am – 9:02 am	<b>Frequency of Carotid Intraplaque Hemorrhage on Vessel Wall Imaging in Patients with Retinal Artery Occlusion, Anthony Larson, BS</b>
9:02 am – 9:10 am	<b>Acute Central Retinal Artery Occlusion Seen Within 24 Hours at a Tertiary Stroke Center, Wesley Chan, MD, MSc</b>
9:10 am – 9:18 am	<b>Pathogenic NR2F1 Variants Cause a Systemic Neurodevelopmental Ocular Phenotype Recapitulated in a Mutant Mouse Model, Neringa Jurkute, MD, FEBO</b>
9:18 am – 9:26 am	<b>Decreased Vision in Multiple Sclerosis is Associated With Novel Foveal Features Visualized Using Adaptive Optics, Aubrey C. Hargrave, PhD</b>
9:26 am – 10:00 am	<b>Q&amp;A</b>

**10:00 am – 10:15 am**                      **Break**  
**10:15 am – 12:15 pm**                      **TBI and the Neuro-Ophthalmologist [2.0 CME]**  
*Moderators: Laura Balcer, MD, MSCE and Courtney Francis, MD*

This session will demonstrate for the neuro-ophthalmologist mechanisms underlying traumatic brain injury (TBI), enumerate the afferent and efferent visual signs and symptoms, and impart knowledge

regarding the characteristics of dizziness in the TBI setting. The roles for rehabilitation techniques will also be addressed, as will potential medicolegal issues associated with this condition.

Upon completion of this session, participants should be able to: (1) utilize increased knowledge of the most common afferent and efferent neuro-ophthalmologic signs and symptoms of TBI, (2) use history and examination skills to capture symptoms and signs associated with dizziness in TBI, and (3) demonstrate improved awareness and use of rehabilitation techniques for treatment of neuro-ophthalmologic signs and symptoms of TBI.

10:15 am -10:45 am	<b>Mechanism, Diagnosis and Classification of TBI, James Kelly, MD</b>
10:45 am – 10:58 am	<b>Afferent Symptoms and Signs, Randy Kardon, MD, PhD</b>
10:58 am – 11:11 am	<b>Efferent Symptoms and Signs, Janet Rucker, MD</b>
11:11 am – 11:27 am	<b>Dizziness and TBI: What’s the Connection? Dan Gold, DO</b>
11:27 am – 11:47 am	<b>TBI Rehabilitation, James Kelly, MD</b>
11:47 am – 12:00 pm	<b>Medicolegal Issues in TBI, Craig Smith, MD</b>
12:00 pm – 12:15 pm	<b>Q&amp;A</b>
<b>12:15 pm – 12:45 pm</b>	<b>Break</b>
<b>12:45 pm – 2:15 pm</b>	<b>Scientific Platform Session II [1.5 CME]</b> <i>Moderators: Susan Mollan, FRCOphth and Kenneth Shindler, MD, PhD</i>
12:45 pm – 12:53 pm	<b>Efficacy of Visual Retraining in Hemianopic Fields After Stroke: Results of a Randomized Clinical Trial, Matthew R. Cavanaugh, PhD</b>
12:53 pm – 1:01 pm	<b>Ectopic Melanopsin for Visual Restoration: Compressed Cell-Specific Promotors – a Translatable Delivery Mechanism, Michael James Gilhooley, MA, MB, Bchir, PhD, FRCOphth</b>
1:01 pm – 1:09 pm	<b>Assessment of rAAV2/2-ND4 Gene Therapy Efficacy in LHON Using an External Control Group, Nancy J. Newman, MD</b>
1:09 pm – 1:18 pm	<b>Leber’s Hereditary Optic Neuropathy in Women, Giulia Amore, MD</b>
1:18 pm – 1:26 pm	<b>Patient Harm from Diagnostic Error of Neuro-Ophthalmologic Conditions, Leanne Stunkel, MD</b>
1:26 pm – 1:34 pm	<b>Significance of Incidental Imaging Signs of Intracranial Hypertension with Corresponding Fundus Photography: A Prospective Study, Benjamin I. Meyer, BS</b>
1:34 pm – 1:42 pm	<b>Masked Analysis of the Clinical Utility of Commercially Available Antiretinal and Anti-Optic Nerve Antibody Testing, John J. Chen, MD, PhD</b>
1:42 pm – 2:15 pm	<b>Q&amp;A</b>
<b>2:15 pm – 2:30 pm</b>	<b>Break</b>
<b>2:30 pm – 3:30 pm</b>	<b>NANOS Talent Show</b>

Neuro-ophthalmologists have a lot of superpowers that will be revealed during the NANOS Talent Show taking place live. Creativity, smiles, and enjoyment are guaranteed. NANOS's Got Talent is hosted by Drs. Melissa W. Ko & Peter Quiros. Join in the fun!

**5:00 pm – 7:00 pm**

**WIN/YONO Hangout**

Join your colleagues for networking in Gather Town in between sessions from 5:00 pm – 7:00 pm. Login details will be published in the Auditorium event listing.

5:00 pm – 5:30 pm

**Reflections and WINDOWS of Opportunities**

*Moderators: Madhura Tamhankar, MD and Barbara Yates, MD  
Panelists: Lynn Gordon, MD, PhD, Hong Jiang, MD, PhD,  
Sangeeta Khanna, MD, Melissa W. Ko, MD, FAAN, CPE and  
Heather E. Moss, MD, PhD*

5:45 pm – 6:15 pm

**YONO**

5:45 pm – 5:47 pm

**Welcome/Introduction**

5:47 pm – 5:52 pm

**YONO - Choosing Career Path(s)- Ophthalmology vs. Neurology Residency**

*Moderator: Leanne Stunkel, MD  
Panelists: Zeeshan Haq, MD, Nailyn Rasool, MD, and Jeremy  
Tanner, MD, MPH*

5:52 pm – 5:57 pm

**YONO - Neuro-Ophthalmology and Surgery**

*Moderator: Andrew Melson, MD  
Panelists: Kevin Lai, MD, Collin McClelland, MD, and Prem S.  
Subramanian, MD, PhD*

5:57 pm – 6:02 pm

**YONO - Combining Multiple Neurology Sub-Specialties Into Your Practice**

*Moderator: Leanne Stunkel, MD  
Panelists: Fiona Costello, MD, FRCPC, Nathan Kung, MD and  
Stacy V. Smith, MD*

6:02 pm – 6:07 pm

**YONO - Career Pathways in Neuro-Ophthalmology – Research/Clinical/Program Director /Education/Industry**

*Moderator: Melinda Chang, MD  
Panelists: Aubrey Gilbert, MD, PhD, Melissa W. Ko, MD and  
Peter Quiros, MD*

6:07 pm – 6:12 pm

**YONO - First Year in Practice: What I Wish I Would Have Known**

*Moderator: Allison Liu, MD, PhD  
Panelists: Melinda Chang, MD, Lauren Ditta, MD, Kimberly  
Gokoffski, MD, PhD, and Andrew Melson, MD*

6:12 pm – 6:15 pm

**Closing**

**7:15 pm – 8:15 pm**

**Abstract Committee Meeting**



## **Tuesday, February 23<sup>rd</sup>**

**All are encouraged to do yoga, view posters, on-demand content, and visit the exhibit hall at their leisure.**

**8:00 am – 10:00 am**

### **Cognitive Disorders and Vision [2.0 CME]**

*Moderators: Victoria S. Pelak, MD and Sashank Prasad, MD*

Cognitive visual disorders result from some of the most common diseases of aging that we encounter, including cerebrovascular and neurodegenerative diseases. This session will review the classification of higher order visual processing, pertinent visual features for common neurodegenerative diseases (i.e. Alzheimer's disease, Parkinson's disease, and Lewy Body Dementia), advances that have been made in neuroimaging related to cognitive visual dysfunction, and the future of ophthalmic imaging as a biomarker for diseases impacting visual cognition.

Upon completion of this session, participants should be able to: (1) identify and list higher order visual processing disorders, their associated clinical anatomy and the differential diagnosis, (2) understand available imaging tools to aid in the diagnosis of visual cognitive dysfunction, and (3) provide treatment strategies and management recommendations for visual cognitive dysfunction, specifically acquired disorders for reading.

8:00 am – 8:20 am

**Classifying Disorders of Higher-Order Visual Processing, Jason Barton, MD, PhD, FRCPC**

8:20 am – 8:35 am

**Alzheimer's Disease, Parkinson's Disease, Lewy Body Dementia, and Posterior Cortical Atrophy Syndrome: Distinguishing Visual Features, Victoria S. Pelak, MD**

8:35 am – 8:50 am

**Advances in Neuroimaging: New Diagnostic Clues? Sashank Prasad, MD**

8:50 am – 9:05 am

**Use of Ophthalmic Imaging as a Biomarker, Hong Jiang, MD, PhD**

9:05 am – 9:45 am

**Treating Form, Time and Space: e-Therapies for Acquired Disorders of Reading, Alexander Leff, MBBS, PhD, FRCP**

9:45 am – 10:00 am

**Q&A**

**10:00 am – 10:30 am**

**Break**

**10:30 am – 12:00 pm**

### **Controversies in Pediatric Neuro-Ophthalmology [1.5 CME]**

*Moderators: Grant Liu, MD and Paul H. Phillips, MD*

The management of pediatric neuro-ophthalmologic patients is often controversial. As many pediatric neuro-ophthalmologic conditions are uncommon, sufficient data is often unavailable to provide definitive evidence-based guidelines for diagnostic evaluation and treatment. This symposium will review controversies regarding the management of various pediatric neuro-ophthalmologic entities including papilledema, optic neuritis, vigabatrin toxicity, optic pathway gliomas, and infantile nystagmus syndrome.

Upon completion of this session, participants should be able to: (1) understand which tests are required for the diagnosis of various pediatric neuro-ophthalmologic entities, (2) understand the interpretation of tests that are required for the diagnosis of various pediatric neuro-ophthalmologic entities, and (3) understand the limitations of tests that are required for the diagnosis of various pediatric neuro-ophthalmologic entities.

10:30 am – 10:48 am	<p><b>Monitoring Children on Vigabatrin - ERG versus No ERG with Clinical Follow-Up</b>  <b>ERG Beneficial</b>, <i>Steven F. Stasheff, MD, PhD</i>  <b>ERG Not Beneficial</b>, <i>Michael Wan, MD, FRCSC</i>  <b>Q&amp;A (live)</b></p>
10:48 am – 11:06 am	<p><b>Work-Up of Children with Isolated Optic Neuritis – MOG/NMO/LP On All, or Some Focused Work-Up</b>, <i>Jason Peragallo, MD</i>  <b>Extensive Work-Up</b>, <i>Jennifer Graves, MD, PhD, MAS</i>  <b>Q&amp;A (live)</b></p>
11:06 am – 11:24am	<p><b>Evaluation of Child with Full Optic Disc - Role of Imaging in Distinguishing Pseudopapilledema versus Real Papilledema – (Role of Ultrasound, OCT, FA)</b>  <b>OCT is Useful/Primary</b>, <i>Mays El-Dairi, MD</i>  <b>OCT is Not Useful (Try Something Else)</b>, <i>Stacy L. Pineles, MD</i>  <b>Q&amp;A (live)</b></p>
11:24 am – 11:42 am	<p><b>Evaluation for Optic Pathway Glioma</b>  <b>OCT Should Guide Clinical Decision Making</b>, <i>Shannon Beres, MD</i>  <b>OCT Does Not Guide Clinical Decision Making</b>, <i>Robert Avery, DO</i>  <b>Q&amp;A (live)</b></p>
11:42 am – 12:00 pm	<p><b>Diagnostic Work-Up of a Child with Nystagmus - ERG? Image? Genetic Testing? Genetic Testing Before or After ERG? Work-Up for Underlying Etiology Which May Include ERG and Genetic Testing</b>, <i>Gena Heidary, MD, PhD</i>  <b>Observe Without Further Work-up If Otherwise Neurologically Normal</b>, <i>Mark Borchert, MD</i>  <b>Q&amp;A (live)</b></p>
1:00 pm – 2:00 pm	<p><b>Poster Chat Session IV (Posters 149-220)</b>  <b>Neuromyelitis Optica Spectrum Disorder: Applying Newer Diagnostic Criteria and Examining Expanding Options for Treatment*</b></p>
2:00 pm – 3:00 pm	

\*This continuing medical education activity is provided by Vindico Medical Education. This activity is supported by an educational grant from Genentech, a member of the Roche Group.

Neuromyelitis optica spectrum disorder (NMOSD) is a rare, relapsing, autoimmune disease that is characterized by inflammation in the optic nerve and spinal cord. Diagnosing NMOSD is challenging, but diagnostic criteria—based on the presence of core clinical characteristics, aquaporin-4 (AQP4) antibody status, and magnetic resonance imaging—have been developed that allows for a differential diagnosis from other inflammatory disorders of the central nervous system. Treatment options for NMOSD have

been historically limited, until recently—when the US Food and Drug Administration approved 3 novel therapies for the treatment and prevention of NMOSD attacks. Further therapies are currently under clinical review for the same indication. These approved and emerging therapies are changing the treatment paradigm for NMOSD, providing enhanced clinical outcomes for these patients. Within this CME activity, experts in the field will summarize evidence-based diagnostic criteria and best practices that assist in the differential diagnosis of NMOSD, as well as assess the efficacy of conventional and emerging therapies for the treatment and prevention of NMOSD attacks.

Upon successful completion of this activity, participants will be able to: (1) Summarize evidence-based diagnostic criteria and best practices that assist in the differential diagnosis of NMOSD, and (2) assess the efficacy of conventional and emerging therapies for the treatment and prevention of NMOSD attacks.

2:00 pm – 2:05 pm	<b>Introduction</b> , <i>Prem S. Subramanian, MD, PhD</i>
2:05 pm – 2:25 pm	<b>NMOSD: Discussing a Rare and Difficult Diagnosis</b> , <i>Patricia K. Coyle, MD, FAAN, FANA</i>
2:25 pm – 2:45 pm	<b>Assessing New Evidence in Prevention and Treatment of Acute NMOSD Attacks</b> , <i>Prem S. Subramanian, MD, PhD</i>
2:45 pm – 3:00 pm	<b>Q&amp;A</b>
<b>3:00 pm – 4:00 pm</b>	<b>CME Committee Meeting</b>
<b>4:00 pm – 5:00 pm</b>	<b>Consortium of Pediatric Neuro-Ophthalmologists Meeting (CPNO)</b> All are welcome to attend. <i>Facilitators: Shannon Beres, MD and Gena Heidary, MD, PhD</i>
<b>6:00 pm – 7:00 pm</b>	<b>Awards Ceremony</b>

Celebrate with us as we recognize the 2021 award winners! Tune in as we announce the winners of the NANOS talent show, recipients of the Pilot Grant and Leadership grant, 2021 Merit Award winner, Best Abstract awards, Best Frank B. Walsh Paper Presentation by a Fellow, Young Investigator Award, and much more!

#### **Additional On-Demand Content**

**NOVEL Update**, *Kathleen Digre, MD*

**JNO Update**, *Laura Balcer, MD, MSCE*

**Morning Yoga**, *Peter Quiros, MD*

#### **YONO - Choosing Career Path(s)- Ophthalmology vs. Neurology Residency**

*Moderator: Leanne Stunkel, MD*

*Panelists: Zeeshan Haq, MD, Nailyn Rasool, MD, and Jeremy Tanner, MD, MPH*

#### **YONO - Neuro-Ophthalmology and Surgery**

*Moderator: Andrew Melson, MD*

*Panelists: Kevin Lai, MD, Collin McClelland, MD, and Prem S. Subramanian, MD, PhD*

**YONO - Combining Multiple Neurology Sub-Specialties Into Your Practice**

*Moderator: Leanne Stunkel, MD*

*Panelists: Fiona Costello, MD, FRCPC, Nathan Kung, MD, and Stacy V. Smith, MD*

**YONO - Career Pathways in Neuro-Ophthalmology - Research/Clinical/Program Director  
/Education/Industry**

*Moderator: Melinda Chang, MD*

*Panelists: Aubrey Gilbert, MD, PhD, Melissa W. Ko, MD and Peter Quiros, MD*

**YONO - First Year in Practice: What I Wish I Would Have Known**

*Moderator: Allison Liu, MD, PhD*

*Panelists: Melinda Chang, MD, Lauren Ditta, MD, Kimberly Gokoffski, MD, PhD, and Andrew Melson, MD*