

MODULE 1 – EYE DEVELOPMENT/EYE OPTICS/CORNEA/REFRACTIVE ERROR/MYOPIA CONTROL

January 4, 2021 – Monday

9:00 AM

Introduction BSCO (1 hour)

Andrei V. Tkatchenko, MD, PhD – *Columbia University, New York, USA*

Ronald H. Silverman, PhD – *Columbia University, New York, USA*

Molecular Regulation of Eye Development (1 hour)

Xin Zhang, PhD – *Columbia University, New York, USA*

Development of retinal ganglion cells and their connections with the brain: replacement and reconnection after injury (1 hour)

Carol Mason, PhD – *Columbia University, New York, USA*

Orbital Anatomy

Daniel Casper, MD – *Columbia University, New York, USA*

Surgical Anatomy of the Globe

Hermann Schubert, MD – *Columbia University, New York, USA*

January 5, 2021 – Tuesday

9:00 AM

Eye Development and Anatomy – Q&A and Discussion (0.5 hours) **live session**

Xin Zhang, PhD – *Columbia University, New York, USA*

Carol Mason, PhD – *Columbia University, New York, USA*

Daniel Casper, MD – *Columbia University, New York, USA*

Hermann Schubert, MD – *Columbia University, New York, USA*

Ophthalmic Optics (7 hours)

David Guyton, MD – *Johns Hopkins University, Baltimore, USA*

Kristina Irsch, PhD – *Institut de la Vision, Paris, France*

January 6, 2021 – Wednesday

9:00 AM

Ophthalmic Optics – Q&A and Discussion (0.5 hours) **live session**

David Guyton, MD – *Johns Hopkins University, Baltimore, USA*

Kristina Irsch, PhD – *Institut de la Vision, Paris, France*

Accommodation and Presbyopia (1 hour)

Donald J. Coleman, MD – *Columbia University, New York, USA*

Basic Science of Refractive Eye Development and Myopia (1 hour)

Andrei V. Tkatchenko, MD, PhD – *Columbia University, New York, USA*

Role of Peripheral Vision in Ocular Growth and Refractive Eye Development (1 hour)

Earl Smith, OD, PhD – *University of Houston, Houston, USA*

Circadian Rhythms and Refractive Eye Development (1 hour)

Debora Nickla, PhD – *New England College of Optometry, Boston, USA*

Role of contrast perception and longitudinal chromatic aberrations in optical defocus perception (1 hour)

Timothy Gawne, PhD – *University of Alabama in Birmingham, Birmingham, USA*

Genetics of Myopia (1 hour)

Chris Hammond, MD, MRCP, FRCOphth – *King's College London, London, UK*

January 7, 2021 – Thursday

9:00 AM

Accommodation and Refractive Development – Q&A and Discussion (0.5 hours) **live session**

Donald J. Coleman, MD – *Columbia University, New York, USA*

Andrei V. Tkatchenko, MD, PhD – *Columbia University, New York, USA*

Earl Smith, OD, PhD – *University of Houston, Houston, USA*

Debora Nickla, PhD – *New England College of Optometry, Boston, USA*

Timothy Gawne, PhD – *University of Alabama in Birmingham, Birmingham, USA*

Chris Hammond, MD, MRCP, FRCOphth – *King's College London, London, UK*

Contact Lenses (1 hour)

Suzanne Sherman, OD – *Columbia University, New York, USA*

Myopia Control (1 hour)

Jeffrey Cooper, MS, OD, FAAO – *Cooper Eye Care, New York, USA*
 Shira Kresch, MS, OD, FAAO – *Columbia University, New York, USA*

Origins of Clinical Refractive Technology (1 hour)

Stephen Trokel, MD – *Columbia University, New York, USA*

Refractive Surgery: Overview and Complications (1 hour)

Christopher E. Starr, MD – *Weill Cornell Medicine, New York, USA*

Refractive Surgery: Worldwide perspective (2 hours)

Dan Z. Reinstein, MD – *London Vision Clinic, London, UK*

January 8, 2021 – Friday**9:00 AM****Myopia Control and Refractive Surgery – Q&A and Discussion (0.5 hours) live session**

Suzanne Sherman, OD – *Columbia University, New York, USA*
 Jeffrey Cooper, MS, OD, FAAO – *Cooper Eye Care, New York, USA*
 Shira Kresch, MS, OD, FAAO – *Columbia University, New York, USA*
 Stephen Trokel, MD – *Columbia University, New York, USA*
 Christopher E. Starr, MD – *Weill Cornell Medicine, New York, USA*
 Dan Z. Reinstein, MD – *London Vision Clinic, London, UK*

REFRACTION WORKSHOP (8 hours)**Retinoscopy: Lecture**

Mark E. Wilkinson, OD, FAAO – *University of Iowa, Iowa City, USA*

Retinoscopy: Workshop

Shira Kresch, MS, OD, FAAO – *Columbia University, New York, USA*
 Suzanne Sherman, OD – *Columbia University, New York, USA*
 Sonali Talsania, MD – *Columbia University, New York, USA*
 Fiza Shuja, OD – *Columbia University, New York, USA*

Refraction: Lecture

Mark E. Wilkinson, OD, FAAO – *University of Iowa, Iowa City, USA*

Refraction: Workshop

Shira Kresch, MS, OD, FAAO – *Columbia University, New York, USA*
 Suzanne Sherman, OD – *Columbia University, New York, USA*
 Sonali Talsania, MD – *Columbia University, New York, USA*
 Fiza Shuja, OD – *Columbia University, New York, USA*
 Mark E. Wilkinson, OD, FAAO – *University of Iowa, Iowa City, USA*

January 11, 2021 – Monday**9:00 AM****Basic Cornea and External Eye Diseases (1 hour)**

LeeJee H. Suh, MD – *Columbia University, New York, USA*

Anterior Segment Imaging (1 hour)

LeeJee H. Suh, MD – *Columbia University, New York, USA*

Corneal Infections and Keratoprosthesis (1 hour)

Danielle Trief, MD – *Columbia University, New York, USA*

Corneal Dystrophies and Corneal Transplantation (2 hours)

George Florakis, MD – *Columbia University, New York, USA*

Antibiotics, Antifungals, Antivirals: Pharmacokinetics and Pharmacodynamics (1 hour)

Michael J. Weiss, MD – *Columbia University, New York, USA*

MODULE 2 – CATARACT AND GLAUCOMA**January 12, 2021 – Tuesday****9:00 AM****Cornea, Corneal Infections and Transplantation – Q&A and Discussion (0.5 hours) live session**

LeeJee H. Suh, MD – *Columbia University, New York, USA*
 Danielle Trief, MD – *Columbia University, New York, USA*
 George Florakis, MD – *Columbia University, New York, USA*

Michael J. Weiss, MD – *Columbia University, New York, USA*

Pre-op Evaluation and Consent

George Cioffi, MD – *Columbia University, New York, USA*

Refractive considerations in cataract surgery: basic optics, biometry, IOL calculations, and IOL choices including torics and multifocals (1 hour)

Paul Krawitz, MD – *Columbia University, New York, USA*

Phacodynamics

James Auran, MD – *Columbia University, New York, USA*

Anesthesia: blocks, topical, intracameral

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Viscoelastics

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Lens staining/Capsulorrhexis, Hydrodissection/Hydrodelineation

Lisa Park, MD – *Columbia University, New York, USA*

Phaco techniques

Roslyn M. Stahl – *Columbia University, New York, USA*

Cortical removal / IOL insertion

LeeJee H. Suh, MD – *Columbia University, New York, USA*

Handling complications: Capsular Rupture / Anterior vitrectomy

Danielle Trief, MD – *Columbia University, New York, USA*

Handling complex cases: small pupil/pseudoexfoliation/floppy iris

George Cioffi, MD – *Columbia University, New York, USA*

Postoperative management

Roslyn M. Stahl – *Columbia University, New York, USA*

PHACO WORKSHOP

How to prepare for phaco: dry-lab demonstration

Lisa Park, MD – *Columbia University, New York, USA*

January 13, 2021 – Wednesday

9:00 AM

Cataract and Phaco – Q&A and Discussion live session

Paul Krawitz, MD – *Columbia University, New York, USA*

Grace Sun, MD – *Weill Cornell Medicine, New York, USA*

Lisa Park, MD – *Columbia University, New York, USA*

George Cioffi, MD – *Columbia University, New York, USA*

James Auran, MD – *Columbia University, New York, USA*

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Roslyn M. Stahl – *Columbia University, New York, USA*

LeeJee H. Suh, MD – *Columbia University, New York, USA*

Danielle Trief, MD – *Columbia University, New York, USA*

Fundamentals of Perimetry (1 hour)

George Cioffi, MD – *Columbia University, New York, USA*

Examination of the Optic Nerve (1 hour)

Jeffrey M. Liebmann, MD – *Columbia University, New York, USA*

Structure-Function Relationship in Glaucoma (1 hour)

Gustavo De Moraes, MD – *Columbia University, New York, USA*

Optical Coherence Tomography (1 hour)

Don Hood, PhD – *Columbia University, New York, USA*

Optic Nerve Head Biomechanics (1 hour)

Claude F. Burgoyne, MD – *Devers Eye Institute, Portland, USA*

Glaucoma laboratory science (1 hour)

Gulgun Tezel, MD – *Columbia University, New York, USA*

January 14, 2021 – Thursday

9:00 AM

Glaucoma Risk Factors (1 hour)

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Glaucoma genetics (1 hour)

Aliaa Abdelhakim, MD, PhD – *Columbia University, New York, USA*

Secondary Glaucomas (1 hour)

Sung Chul (Sean) Park, MD – *Manhattan Eye, Ear and Throat Hospital, New York, USA*

Major Prospective Trials in Glaucoma (1 hour)

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Minimally Invasive Glaucoma Surgery and Laser Surgery (1 hour)

Noga Harizman, MD – *Columbia University, New York, USA*

Case presentations & decision making: OHT, XFG, target IOP, surgical decisions (1 hour)

Jeffrey M. Liebmann, MD – *Columbia University, New York, USA*

Gustavo De Moraes, MD – *Columbia University, New York, USA*

GLAUCOMA DRY LAB WORKSHOP (1 hours)

Introduction to Glaucoma Surgery

Noga Harizman, MD – *Columbia University, New York, USA*

MODULE 3 – NEURO-OPHTHALMOLOGY, PATHOLOGY, ONCOLOGY

January 15, 2021 – Friday

9:00 AM

Glaucoma – Q&A and Discussion (0.5 hours) live session

George Cioffi, MD – *Columbia University, New York, USA*

Jeffrey M. Liebmann, MD – *Columbia University, New York, USA*

Gustavo De Moraes, MD – *Columbia University, New York, USA*

Don Hood, PhD – *Columbia University, New York, USA*

Claude F. Burgoyne, MD – *Devers Eye Institute, Portland, USA*

Gulgun Tezel, MD – *Columbia University, New York, USA*

Dana Blumberg, MD, MPH – *Columbia University, New York, USA*

Aliaa Abdelhakim, MD, PhD – *Columbia University, New York, USA*

Sung Chul (Sean) Park, MD – *Manhattan Eye, Ear and Throat Hospital, New York, USA*

Noga Harizman, MD – *Columbia University, New York, USA*

Neuro-Ophthalmology of Pupil (1 hour)

Golnaz Moazami, MD – *Columbia University, New York, USA*

Neuromyelitis Optica (NMO), MOG antibody demyelination, paraneoplastic and autoimmune diseases (2 hours)

John J. Chen, MD, PhD – *Mayo Clinic, Rochester, USA*

Giant Cell Arteritis (AION), Ischemic Optic Neuropathy (NAION) (1 hour)

Jeffrey Odel, MD – *Columbia University, New York, USA*

Idiopathic Intracranial Hypertension, Papilledema, Pseudopapilledema (1 hour)

Marc J. Dinkin, MD – *Weill Cornell Medicine, New York, USA*

Oculomotor System and Vestibular Ocular Reflex (1 hour)

Michael Goldberg, MD – *Columbia University, New York, USA*

Clinical Eye Movement Disorders: Cortex, Brainstem and Cerebellar Disorders (1 hour)

Linus Sun, MD, PhD – *Columbia University, New York, USA*

Sixth Sense (1 hour)

Jeffrey Odel, MD – *Columbia University, New York, USA*

January 18, 2021 – Monday

9:00 AM

Neuro-Ophthalmology I – Q&A and Discussion (0.5 hours) live session

Golnaz Moazami, MD – *Columbia University, New York, USA*

John J. Chen, MD, PhD – *Mayo Clinic, Rochester, USA*

Jeffrey Odel, MD – *Columbia University, New York, USA*

Marc J. Dinkin, MD – *Weill Cornell Medicine, New York, USA*

Michael Goldberg, MD – *Columbia University, New York, USA*

Linus Sun, MD, PhD – *Columbia University, New York, USA*

Functional Neuro-Ophthalmology (1 hour)

Jonathan Trobe, MD – *University of Michigan, Ann Arbor, USA*

Interpretation of VF (1 hour)

Jonathan Trobe, MD – *University of Michigan, Ann Arbor, USA*

Visual Pathway Representations in Cortex - Strabismus and Amblyopia, Cortical Vision Loss,

Wilbrand's Knee and Lesions of Optic Chiasm (2 hours)

Jonathan C. Horton, MD, PhD – *University of California, San Francisco, USA*

Neuro-Ophtho-Radiology (1 hour)

Gul Moonis, MD – *Columbia University, New York, USA*

Neurovascular Disorders: Amaurosis Fugax, Posterior Circulation, posterior reversible encephalopathy syndrome (1 hour)

Mitchell Elkind, MD – *Columbia University, New York, USA*

Multiple Sclerosis and Other Neuro-Inflammatory Syndromes (1 hour)

Claire S. Riley, MD – *Columbia University, New York, USA*

Headache and Vision (1 hour)

Marianna Yugrakh, MD – *Columbia University, New York, USA*

January 19, 2021 – Tuesday

9:00 AM

Neuro-Ophthalmology II – Q&A and Discussion (0.5 hours) *live session*

Jonathan Trobe, MD – *University of Michigan, Ann Arbor, USA*

Jonathan C. Horton, MD, PhD – *University of California, San Francisco, USA*

Gul Moonis, MD – *Columbia University, New York, USA*

Mitchell Elkind, MD – *Columbia University, New York, USA*

Claire S. Riley, MD – *Columbia University, New York, USA*

Marianna Yugrakh, MD – *Columbia University, New York, USA*

Thyroid Eye Disease – Evaluation and Medical Management (1 hour)

Peter Dolman, MD – *University of British Columbia, Vancouver, Canada*

Thyroid Eye Disease – Surgical Management (1 hour)

Michael Kazim, MD – *Columbia University, New York, USA*

Pediatric Orbital Tumors Management (1 hour)

William R. Katowitz, MD – *Children's Hospital of Philadelphia, Philadelphia, USA*

Adult Orbital Tumors Management (1 hour)

Michael Kazim, MD – *Columbia University, New York, USA*

Eyelid Tumors, Reconstruction and Malpositions (1 hour)

Lora Glass, MD – *Columbia University, New York, USA*

Lacrimal System Disorders Evaluation and Management/Management of Anophthalmic Socket (1 hour)

Kyle Godfrey, MD – *Weill Cornell Medicine, New York, USA*

Orbital and Eyelid Trauma (1 hour)

Alexandra Braunstein, MD – *Columbia University, New York, USA*

January 20, 2021 – Wednesday

9:00 AM

Oculoplastics – Q&A and Discussion (0.5 hours) *live session*

Peter Dolman, MD – *University of British Columbia, Vancouver, Canada*

Michael Kazim, MD – *Columbia University, New York, USA*

William R. Katowitz, MD – *Children's Hospital of Philadelphia, Philadelphia, USA*

Michael Kazim, MD – *Columbia University, New York, USA*

Lora Glass, MD – *Columbia University, New York, USA*

Kyle Godfrey, MD – *Weill Cornell Medicine, New York, USA*

Alexandra Braunstein, MD – *Columbia University, New York, USA*

Pathophysiology of Ocular Tumors (5 hours)

Brian Marr, MD – *Columbia University, New York, USA*

January 21, 2021 – Thursday

9:00 AM

Ocular Tumors – Q&A and Discussion (0.5 hours) live session

Brian Marr, MD – *Columbia University, New York, USA*

WORKSHOP – ANATOMY OF THE ORBIT

The Orbital Apex (1 hour)

Daniel Casper, MD – *Columbia University, New York, USA*

Blepharoplasty: Indications, Techniques, Complications (1 hour)

Jeffrey Ascherman, MD – *Columbia University, New York, USA*

Facial Rejuvenation: Botulinum Toxin & Fillers

Lora R. Glass, MD – *Columbia University, New York, USA*

Dissection Workshop (2 hours)

Daniel Casper, MD – *Columbia University, New York, USA*

MODULE 4 – RETINAL DISEASES

January 22, 2021 – Friday

9:00 AM

Anatomy of the Orbit – Q&A and Discussion (0.5 hours) live session

John Merriam, MD – *Columbia University, New York, USA*

Jeffrey Ascherman, MD – *Columbia University, New York, USA*

Martin Leib, MD – *Columbia University, New York, USA*

Daniel Casper, MD – *Columbia University, New York, USA*

Retinal pigment epithelium in disease and fundus autofluorescence (1 hour)

Janet Sparrow, PhD – *Columbia University, New York, USA*

Adaptive Optics and its role in the Diagnosis and Management of Retinal Disorders (1 hour)

Richard B. Rosen, MD – *Icahn School of Medicine at Mount Sinai, New York, USA*

Retinal imaging (1 hour)

Gadi Wollstein, MD – *New York University, New York, USA*

Ultrasound Imaging in Retinal Disease (1 hour)

Ronald H. Silverman, PhD – *Columbia University, New York, USA*

Optical coherence tomography angiography (OCTA) (1 hour)

David Huang, MD, PhD – *Oregon Health & Science University, Portland, USA*

January 25, 2021 – Monday

9:00 AM

Eye Imaging – Q&A and Discussion (0.5 hours) live session

Janet Sparrow, PhD – *Columbia University, New York, USA*

Richard B. Rosen, MD – *Icahn School of Medicine at Mount Sinai, New York, USA*

Gadi Wollstein, MD – *New York University, New York, USA*

Ronald H. Silverman, PhD – *Columbia University, New York, USA*

David Huang, MD, PhD – *Oregon Health & Science University, Portland, USA*

New Targets for AMD Pharmacotherapy (1 hour)

Antonio Ciardella, MD – *Policlinico S.Orsola-Malpighi, Universita di Bologna, Italy*

Update on Diabetic Retinopathy Treatment (1 hour)

Srilaxmi Beareilly, MD – *Columbia University, New York, USA*

Central Serous Chorioretinopathy: Towards and Evidence-Based Treatment Guideline (1 hour)

Lawrence Yannuzzi, MD – *New York University, New York, USA*

Multimodal Imaging as a Diagnostic Tool for Uveitis (1 hour)

Royce Chen, MD – *Columbia University, New York, USA*

New Agents and Changing Patterns for the Treatment of Uveitis (1 hour)

Nida Sen, MD – *National Eye Institute, Bethesda, USA*

Uveitis in Patients with CTLA-4 and PD-1 Checkpoint Blockade Inhibition (1 hour)

Henry J. Kaplan, MD – *University of Louisville, Louisville, USA*

January 26, 2021 – Tuesday

9:00 AM

Retinal Diseases I – Q&A and Discussion (0.5 hours) live session

Antonio Ciardella, MD – *Policlinico S.Orsola-Malpighi, Universita di Bologna, Italy*

Srilaxmi Beareilly, MD – *Columbia University, New York, USA*

Lawrence Yannuzzi, MD – *New York University, New York, USA*

Royce Chen, MD – *Columbia University, New York, USA*

Nida Sen, MD – *National Eye Institute, Bethesda, USA*

Henry J. Kaplan, MD – *University of Louisville, Louisville, USA*

Using OCT to improve the outcomes of Macular Surgery (1 hour)

Stanley Chang, MD – *Columbia University, New York, USA*

Human Amniotic Membrane Grafting for Large and Persistent Macular Holes (1 hour)

Tongalp Tezel, MD – *Columbia University, New York, USA*

Keeping the Head Down, or Not? (1 hour)

Jason Horowitz, MD – *Columbia University, New York, USA*

Artificial Intelligence for Diabetic Retinopathy Screening (1 hour)

Michael D. Abramoff, MD, PhD – *University of Iowa, Iowa City, USA*

Robotics and Eye Surgery (1 hour)

Peter L. Gehlbach, MD, PhD – *Johns Hopkins University, Baltimore, USA*

MODULE 5 – PEDIATRIC EYE DISEASES AND OPHTHALMIC GENETICS

January 27, 2021 – Wednesday

9:00 AM

Retinal Diseases II – Q&A and Discussion (0.5 hours) live session

Stanley Chang, MD – *Columbia University, New York, USA*

Tongalp Tezel, MD – *Columbia University, New York, USA*

Jason Horowitz, MD – *Columbia University, New York, USA*

Michael D. Abramoff, MD, PhD – *University of Iowa, Iowa City, USA*

Peter L. Gehlbach, MD, PhD – *Johns Hopkins University, Baltimore, USA*

Introduction to strabismus: classification, sensory and motor testing (1 hour)

Sonali Talsania, MD – *Columbia University, New York, USA*

Amblyopia: diagnosis, classification, pathogenesis, and management (1 hour)

Pamela F. Gallin, MD, FACS – *Columbia University, New York, USA*

Strabismus surgery: procedures and fundamentals (1 hour)

Steven Brooks, MD – *Columbia University, New York, USA*

Retinopathy of prematurity (1 hour)

Steven Brooks, MD – *Columbia University, New York, USA*

Pediatric Neuro-Ophthalmology (1 hour)

Steven Kane, MD – *Columbia University, New York, USA*

Pediatric Cataracts & Glaucoma (1 hour)

Steven Kane, MD – *Columbia University, New York, USA*

January 28, 2021 – Thursday

9:00 AM

Pediatric Eye Diseases – Q&A and Discussion (0.5 hours) live session

Sonali Talsania, MD – *Columbia University, New York, USA*

Pamela F. Gallin, MD, FACS – *Columbia University, New York, USA*

Steven Brooks, MD – *Columbia University, New York, USA*

Steven Kane, MD – *Columbia University, New York, USA*

Common congenital anomalies of the eye (1 hour)

Irene Maumenee, MD – *Columbia University, New York, USA*

Electrodiagnostic (EDD) Cases (Hereditary & Acquired) (2 hours)

Graham E. Holder, MD – *National University of Singapore, Singapore*

Gene therapy for retinal disorders: gateways and obstacles in drug development (1 hour)

Katherine A. High, MD – *Rockefeller University, New York, USA*

Stem Cell Therapy (1 hour)

Masayo Takahashi, MD, PhD – *RIKEN Center for Developmental Biology, Kobe, Japan*

Genetic Testing in Ophthalmology (1 hour)

Megan Soucy, MS – *Columbia University, New York, USA*

January 29, 2021 – Friday

9:00 AM

Ophthalmic Genetics I – Q&A and Discussion (0.5 hours) *live session*

Irene Maumenee, MD – *Columbia University, New York, USA*

Graham E. Holder, MD – *National University of Singapore, Singapore*

Katherine A. High, MD – *Rockefeller University, New York, USA*

Masayo Takahashi, MD, PhD – *RIKEN Center for Developmental Biology, Kobe, Japan*

Megan Soucy, MS – *Columbia University, New York, USA*

Ophthalmic Genetics Case Presentations (4 hours)

Anthony Moore, MD – *University of California San Francisco, San Francisco, USA*

Irene Maumenee, MD – *Columbia University, New York, USA*

BSCO students

Retinal metabolomics in health and disease (1 hour)

James Hurley, PhD – *University of Washington, Seattle, USA*

Mitochondrial Etiology of Ophthalmic Diseases (1 hour)

Douglas C. Wallace, PhD – *University of Pennsylvania, Philadelphia, USA*

Ophthalmic Genetics II – Q&A and Discussion (0.5 hours) *live session*

James Hurley, PhD – *University of Washington, Seattle, USA*

Douglas C. Wallace, PhD – *University of Pennsylvania, Philadelphia, USA*

4:00 PM

CLOSING CEREMONY – ONLINE MIXER *live session*