The month-long Basic Science Course in Ophthalmology incorporates over 160 hours of lectures and workshops by a faculty of over 80 distinguished experts. Among them are:

Ronald H. Silverman, PhD
Course Director
Stephen H. Tsang, MD, PhD
Co-Director
Lama A. Al-Aswad, MD
Rando Allikmets, PhD
Jeffrey Ascherman, MD
James Drake Auram, MD
Srilaxmi Bearelly, MD
Robert A. Braunstein, MD
Alexandra L. Braunstein, MD
Steven Brooks, MD
Dana Blumberg, MD, MPH
Daniel S. Casper, MD, PhD
Jonathan Chang, MD
Stanley Chang, MD
Royce W.S. Chen, MD
George A. Cioffi, MD
Jackson Coleman, MD
Arthur Cotlier, MD
C. Gustavo De Moraes, MD
Nancy Fan-Paul, MD
George Florakis, MD
Pamela Gallin, MD
Michael Goldberg, MD
B. David Gorman, MD
Vivienne Greenstein, PhD
Jason Horowitz, MD
Donald Hoed, PhD
Michael Kazim, MD
Stephen Kane, MD, PhD
Paul L. Krawitz, MD
Martin L. Leib, MD
Robert Lopez, MD
Carol Mason, PhD
John C. Merriam, MD
Golnaz Moazami, MD
Jeffrey G. Odel, MD
Louis D. Pizzarello, MD
Hermann D. Schubert, MD
Janet R. Sparrow, MD
Michael Weiss, MD
Bryan Winn, MD
Lauren Yeager, MD
Xin Zhang, PhD
Since 1941, the Edward S. Harkness Eye Institute at the Columbia University Department of Ophthalmology has offered an ophthalmology basic science course. While the focus of the course is resident training, it has also proven useful for the visual sciences community as a whole. Coursework examines the fundamentals of vision and emphasizes how these basic principles relate to patient care.

The curriculum is developed by a committee of active scientists, practicing clinicians and the chief academic resident, and is updated annually to include the most recent scientific advances as well as any controversial developments in the field. It is also continuously revised in response to feedback from previous course evaluations. An international faculty of more than 80 clinicians and scientists is chosen based on expertise, clarity of presentation, and visual aids.

### 2017 Course Outline

**January 2 – 27, 2017**

- Over 100 hours of lectures
- Two days of instruction in optics, refraction, and retinoscopy
- Imaging Workshops, including ultrasound, OCT, the Pentacam and keratography
- An introduction to microsurgery with a phacoemulsification and lens folding wet lab
- An introduction to glaucoma surgery with a trabeculectomy and valve implant wet lab
- A two-day dissection of the lid, lacrimal system and orbit

### WEEK 1
- Anatomy / Embryology
- Pediatrics

### WEEK 2
- Pathology
- Retina / Vitreous
- Optics

### WEEK 3
- Inflammatory Disease
- Cornea / Refractive Surgery

### WEEK 4
- Glaucoma / Cataracts
- Pediatrics
- Neuro-Ophthalmology

### WORKSHOPS
- Phacoemulsification
- Glaucoma Surgery
- Cadaver Orbital Dissections
- Oculoplastics
- Refraction / Retinoscopy
- Imaging

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**REGISTRATION FORM**

**NAME:** FIRST MIDDLE LAST

**ADDRESS:**

**CITY:** STATE: ZIP CODE:

**EMAIL:**

**RESIDENCY PROGRAM**

**CHAIRMAN/DIRECTOR:**

**ADDRESS:**

**CITY:** STATE: ZIP CODE:

**TELEPHONE:** FAX:

**GENDER:** M F **DATE OF BIRTH:** (for security purposes)

**TUITION**

Early Registration $2,000 (ends November 24, 2016)
Late Registration $2,300 (ends December 30, 2016)

**METHOD OF PAYMENT:**

CREDIT CARD \ CHECK (made out to CUMC Department of Ophthalmology)

CREDIT CARD NUMBER: EXP. DATE:

**SIGNATURE:**

Please mail, fax or email completed form and payment to:
Kenia de los Santos, Course Manager
Columbia University Medical Center
160 Fort Washington Avenue
New York, NY 10032
Tel: 212-305-0285 | Fax: 212-305-5106 | email: bsco@columbia.edu

Register and pay online at columbiaeye.org/education/the-basic-science-course