Scheie Eye Institute at Penn is an international leader in age-related macular degeneration (AMD), the major cause of severe vision loss in the U.S. and throughout the developed world.

The Penn Center for Macular Degeneration has three goals:

• To provide our AMD patients with competent and compassionate care, including appropriate treatment, and to serve as an international resource for patients from around the globe who want an opinion on their condition and advice on available treatment options

• To develop new treatments and evaluate existing treatments, including preventive therapies, that will reduce the likelihood of vision loss from AMD

• To educate the next generation of ophthalmologists and vision scientists so that they may continue the tradition of excellence in patient care and discovery in research

To achieve these goals, our ophthalmologists and vision scientists collaborate in one or more of the areas that comprise the Penn Center for Macular Degeneration as illustrated in the diagram. Much of this work is supported by research grant awards from the National Eye Institute, Research to Prevent Blindness, the Foundation Fighting Blindness, the F.M. Kirby Foundation, the Silbermann Foundation, the Macula Vision Research Foundation, and private philanthropy. Our ultimate goal is to develop preventive strategies that will virtually eliminate severe vision loss from AMD.

• The Retina Service includes eight retina specialists widely respected and admired for their expertise in the care of patients with all stages of AMD. Our retina specialists have been involved in almost every major clinical trial to evaluate new treatments for AMD and are currently recruiting patients for several new investigational treatments. The expertise of our retina doctors is complemented by sophisticated diagnostic and treatment facilities including photography, angiography, ultrasonography, other diagnostic imaging, electrophysiology, laser surgery, photodynamic therapy, a retinal function laboratory; and our full service Low Vision Rehabilitation Center.

• The PENN Center for Low Vision Rehabilitation and Research is devoted exclusively to helping people whose vision cannot be corrected medically or surgically to regain their independence and lead satisfying lives. This goal is accomplished by using specially designed optical systems to enhance remaining vision, as well as by providing counseling, occupational therapy, and social services.

Continued on page 2
Preventing Vision Loss from Macular Degeneration . . .
Continued from page 1

- The Center for Hereditary Retinal Degenerations (CHRD) provides diagnostic evaluation and clinical consultation for patients with inherited forms of retinal degeneration. The CHRD doctors are international leaders in research; they develop and evaluate treatments for patients, including children, with conditions such as retinitis pigmentosa and Leber’s disease.

- The F.M. Kirby Center for Molecular Ophthalmology has over 40 scientists and staff conducting research to develop molecular treatments for genetic diseases, with a particular focus on macular and retinal degenerations. Recent discoveries include an understanding of why vision cells deteriorate in AMD, successful retinal gene therapy in a model of inherited retinal degeneration, and the discovery of a molecule that may stop the growth of new blood vessels in and under the retina in conditions like AMD and diabetic retinopathy.

- With the Medical Therapies Initiative, translational research can fast-track laboratory results to patient care. Novel compounds discovered at Scheie’s F.M. Kirby Center are being developed for the purpose of treating the neovascular or wet stage of late AMD.

- The F.M. Kirby Confocal Microscopy Laboratory allows researchers to examine ocular tissues in a way that enhances their current projects and opens doors to new investigations. A recent study, for example, has revealed microscopic similarities between AMD and Alzheimer’s Disease, suggesting that some drugs under development for Alzheimer’s may be useful for AMD patients. (See “Retina Teaching Set” on page 9 to see picture of drusen taken with the Confocal Microscope)

- The Vivian Simkins Lasko Retinal Vascular Research Laboratory utilizes techniques pioneered and developed at Scheie Eye Institute to measure ocular blood flow in patients with diabetes, macular degeneration, and glaucoma. The immediate goal is to develop better treatments for these conditions, based on improved blood flow to the eye.

- The Center for Preventive Ophthalmology and Biostatistics coordinates large NIH-supported multi-center clinical trials for age-related macular degeneration and other conditions. The Center is coordinating the Complications of Age-related Macular Degeneration Prevention Trial (CAPT), which involves more than 1,000 patients recruited from Scheie and 22 other centers nationwide. If beneficial, the preventive treatment being evaluated could halve the rate of severe vision loss among patients with early AMD. (See “Clinical Trials” on page 6 for more information on the Center for Preventive Ophthalmology and Biostatistics)

With its core of highly skilled ophthalmologists, vision scientists, and state-of-the-art patient care and research facilities, the Penn Center for Macular

Continued on page 8

Macular choroidal blood flow in arbitrary units (A.U.) for patients with early stage AMD and controls. Blood flow is decreased by 36% in patients with early AMD.


One of the roles of the Low Vision center is to select those aids that are most appropriate for each individual patient and then train the patient in their proper use.

Retina Service physicians from left to right: Drs. Alexander Brucker, Michael Tolentino, Robert Stoltz, Albert Maguire, Joshua Dunaief and Stuart Fine (not pictured: Drs. Juan Grunwald and Samuel Jacobson).
Contributions from our friends and patients, from private foundations, and from the business community, help us leap forward in research and in patient care. A $500,000 gift from the Philadelphia Antiques Show has helped the Scheie/Penn Retina Service physicians provide outstanding care, especially for patients with macular degeneration and diabetic retinopathy.

The Philadelphia Antiques Show gift was used to renovate and fully equip six state-of-the-art retina examination rooms, the Photography Laboratory and the Ultrasound Laboratory.

Department Chair Stuart L. Fine observed that the renovated facilities have been much appreciated by our patients.

Recently, the Philadelphia Antiques Show executive board, chaired by Karyn Mullen, met at Scheie to see the results of their generous contribution. After touring the Retina Service facilities, the board was treated to a slide presentation by Dr. Fine on the retina-related research and patient care conducted at Scheie and at all other Penn Eye Care facilities.

The board was delighted to learn how their efforts contribute to better patient care.

Dr. William Frayer and photographer Bill Nyberg demonstrate the versatile “light partitioning” of the photography suite that allows one photographer to take pictures of a patient’s macula in total darkness and another to work under optimal lighting.

Ultrasonographer Kym Gendron discusses a patient’s ultrasound findings with Dr. Leila Khazaeni. An ultrasound exam may be indicated in patients with bleeding or a tumor inside the eye.

Scheie is making great progress towards better treatments and cures for vision loss in age-related macular degeneration and diabetic retinopathy. To find out how you can make a difference by contributing to Scheie, call Ann Sacks at (215) 662-8774 or e-mail ann.sacks@uphs.upenn.edu.
The **4Sight Blindness Prevention Program** was recently awarded a grant from the National Eye Institute’s Healthy Vision 2010 Community Awards. **4Sight** was one of 32 organizations nationwide to receive an award, among 523 organizations that applied.

**Tomas S. Aleman** received 5-year Career Development Award from **Foundation Fighting Blindness** to further his research career at Scheie’s **Center for Hereditary Retinal Degenerations**.

**Jean Bennett, Samuel G. Jacobson** and **Albert M. Maguire** shared with colleagues at Cornell and University of Florida the **Foundation Fighting Blindness Board of Trustees Retinal Degeneration Research Award**. These Penn, Cornell and UF investigators are pioneers in the development of gene therapy for inherited retinal degeneration.

**Alexander J. Brucker** delivered the **21st annual Nachazel Lecture** at William Beaumont Hospital in Royal Oak, Michigan. His topic was “Innovative Treatments for AMD.” Brucker is the lead investigator at Scheie for trials to assess Visudyne photodynamic therapy as well as a new drug for diabetic retinopathy.

**Joshua L. Dunaeif** was awarded grants from the **Steinbach Foundation** and the **International Retina Research Foundation** for the study of AMD. Dunaeif’s publication on “The Role of Apoptosis in AMD” was the cover story for the November 2002 **Archives of Ophthalmology**.

**Samuel G. Jacobson**, the F.M. Kirby Professor of Ophthalmology, and **Artur V. Cideciyan**, Research Associate Professor of Ophthalmology, both senior scientists at Scheie’s Center for Hereditary Retinal Degenerations received a 3-year award from the **Macula Vision Research Foundation** for research on childhood blindness from retinal degeneration. Jacobson and Cideciyan received three additional awards from the Macula Vision Research Foundation (through the Rae S. Uber Trust administered by Mellon Charitable Giving) to study macular degeneration in children, early detection of AMD, and to develop novel ways to measure therapeutic success in treating blindness.

The **Association for Research in Vision and Ophthalmology, Inc. (ARVO)** chose an image from the research of **Eric A. Pierce**, et al., as the cover for all of the ARVO 2003 meeting materials. This research, published in **Investigative Ophthalmology and Visual Science** in January 2002, described the first identification of the RP1 protein and how mutations of this protein are one of the common causes of retinitis pigmentosa. The image shows localization of the RP1 protein in the photoreceptor-connecting cilia of the human retina.
**Excellence and Research Prominence**

Edward N. Pugh, Ph.D. at work in his laboratory on a microscope he built with funds from Research to Prevent Blindness.

Edward Pugh, the Jules and Doris Stein Professor of Ophthalmology and a senior scientist at Scheie’s **F.M. Kirby Center for Molecular Ophthalmology**, is a recipient of this year’s **Alcon Research Institute Award**. Considered one of the most prestigious awards in ophthalmic research, award recipients are selected by an advisory board of twelve distinguished ophthalmologists and vision scientists. The six annual awards are based on past achievements and future promise. Pugh will share the award with his long time collaborator, Trevor Lamb, of Australia National University. Pugh and Lamb have received international recognition for their work quantifying phototransduction, the molecular mechanism by which the rods and cones of the retina create electrical signals from the light that they capture.

Jody R. Piltz-Seymour has been appointed as a member-at-large to the executive board of the **American Glaucoma Society**.

Nicholas J. Volpe was elected President of the **Residency Program Directors Advisory Group** of the Association of University Professors of Ophthalmology.

Steven L. Galetta was awarded Penn’s **Robert Dunning Dripps Teaching Award** for outstanding teaching of residents and fellows.

Terri L. Young was awarded a grant from the **National Eye Institute** to study “The Molecular Genetics of High Myopia.” Young also was appointed to the **NEI Visual Sciences Study Section** and serves as a consultant to the **FDA Ophthalmic Devices Panel of the Medical Devices Advisory Committee**. In September 2003, Young will be featured in the **National Library of Medicine** exhibit titled “History of American Women Physicians.”

Kenneth Shindler, a third year resident, received top ranking among all applicants to the **Heed Ophthalmic Foundation** and will hold the Society of Heed Fellows Fellowship next year during his neuro-ophthalmology fellowship at Scheie.

Leonard Feiner, a second year resident, was one of the four ophthalmologists-in-training to report research findings to the **Association of University Professors of Ophthalmology** at the annual AUPO/Research to Prevent Blindness Resident and Fellow Research Forum. Feiner is working to create genetic models of neovascularization.

Naureen Mirza, a Penn medical student working in Michael Tolentino’s laboratory, received the **Alpha Omega Alpha Student Research Fellowship** to support her research for one year.

**Scheie Eye Institute at the University of Pennsylvania** is recognized in the May 2003 issue of **Philadelphia Magazine** as a Center of Excellence. The article identifies specifically the **Center for Macular Degeneration** and the **4Sight Blindness Prevention Program**.

By Ann Sacks and Michele Szkolnicki

Leonard Feiner, M.D., Ph.D., proudly displays diploma awarded following research presentation at the annual AUPO/RPB Resident and Fellow Research Forum. Stuart Fine, M.D., chairs the annual AUPO/RPB Resident and Fellow Research Forum.
Even the most promising new treatments developed in the laboratory need careful evaluation in patients to find out if the treatments provide benefit or harm compared to standard care. Scheie Eye Institute at Penn is recognized internationally as a leader in the multi-center clinical trials necessary to establish safe and effective treatments. Clinical trials require the expertise of professionals with a wide variety of skills to facilitate the development and assessment of treatments that preserve vision and, just as importantly, to discard treatments that are ineffective or unsafe.

Trials Target Abnormal Blood Vessel Growth

Drs. Alexander Brucker, Albert Maguire, Michael Tolentino, and other members of the Retina Service are investigators for several clinical trials that are evaluating new treatments for patients with age-related macular degeneration (AMD). They are currently evaluating novel laser therapies such as photodynamic therapy as well as novel drugs that are designed to stop new blood vessels from growing under the macula in the neovascular or wet form of macular degeneration. Ongoing development of new treatments and rigorous assessment of their potential value by means of clinical trials are providing substantial expectations that improved treatments for AMD will emerge in the not too distant future.

Expertise Guides National Clinical Trials

Staff at the Center for Preventive Ophthalmology and Biostatistics, directed by Dr. Maureen Maguire, play an important role for several nationwide clinical studies, including the Complications of Age-related Macular Degeneration Prevention Trial (CAPT). Their activities include study design, training staff at participating clinical centers across the U.S., collection and analysis of data, and presentation of study findings to the vision community. Claressa Whearry enters enormous quantities of raw data. Project Director Ellen Peskin and Systems Analyst Mary Brightwell-Arnold transform the data into distilled statistical analyses for CAPT committees, presentations and scientific reports.
Center Lends "Critical" Eye to Study Compliance

The Photograph Reading Center, directed by Judith Alexander, collects photographic images and angiograms of patients enrolled in nationwide clinical trials. Three photograph readers, Revell Whittrock, Keith Elsner, and Noreen Javornik, assess the photographs to confirm eligibility, treatment protocol compliance, and changes in the pathology of the eye during the course of the studies. Dr. Boj Madjarov is orchestrating the transition of the Reading Center from film-based retinal photographs to digital images. Dr. Robert Stoltz will join the Reading Center in July as the principal investigator.

Laser Treatment Aims to Halt Early AMD

The Complications of AMD Prevention Trial (CAPT) is a 22-center trial supported by the National Eye Institute of the NIH. 1,052 patients with early AMD have enrolled. One eye of each patient has received light intensity laser treatment. Patients will be followed for 5 years. The goal of this study is to determine if light intensity laser treatment can reduce the likelihood of vision loss in selected patients with early AMD who are at high risk for vision loss. Dr. Fine is the study chair for this nationwide trial, and Dr. Grunwald is the principal investigator of the clinical center at Scheie Eye Institute at Penn.

Our physicians, scientists and support staff are committed to the goal of eradicating the devastating effects of AMD on vision. Information from past clinical trials has influenced enormously the care of patients with macular degeneration. One of the great strengths of the Scheie Eye Institute at Penn is its international leadership in the design and conduct of randomized clinical trials for important public health problems such as AMD. Ongoing clinical research at Scheie Eye Institute at Penn and its affiliated centers will continue to provide new information to help doctors around the world take better care of their patients for decades to come.
### Housestaff Moving On

**Residents**

**Carolyn Glazer-Hockstein, M.D.**
Carolyn collaborated with Michael Ibarra and Michael Tolentino on a project to evaluate histologic injury to retina and choroid caused by experimental injury from the infrared diode laser. Carolyn will remain at Scheie for a fellowship in medical retina and simultaneously join the Comprehensive Ophthalmology Service.

**Michael S. Ibarra, M.D.**
Mike collaborated with Michael Tolentino and Carolyn Glazer-Hockstein on an experimental model of diode laser injury to the retina. Mike is heading to Beaumont Hospital in Royal Oak, Michigan for a fellowship in vitreoretinal diseases and surgery. Long-range plans include returning to the West Coast.

**Lisa S. Schocket, M.D.**
Lisa, a graduate of Brown and Penn Med, completed many projects in the Vivian Simkins Lasko Retinal Vascular Research Laboratory in collaboration with Juan Grunwald. Lisa is heading to Boston for a fellowship in vitreoretinal surgery at Tufts University/OCB.

**Kenneth S. Shindler, M.D., Ph.D.**
An M.D., Ph.D. from Washington University, Ken has identified neuro-ophthalmology as his interest and will begin a fellowship at Penn before joining the Scheie/Penn faculty in 2004 as a physician-scientist working on neuroprotection. Ken has been awarded the Society of Heed Fellows Fellowship.

**Paul J. Tapino, M.D.**
A graduate of Jefferson Medical College, Paul will become an instructor on the Comprehensive Ophthalmology Service. During his senior year, Paul took an elective in Kenya that allowed him to expand his surgical experience and provided an opportunity for some unforgettable sightseeing as well.

**Fellows**

**Andrew Mohammed, M.D.**
Andrew completed his residency at the Medical College of Virginia before coming to Scheie as a glaucoma fellow. He plans to join a practice where he will specialize in glaucoma.

**Robert A. Stoltz, M.D., Ph.D.**
Rob completed his ophthalmology residency and fellowship in vitreoretinal surgery at Scheie. His fellowship was supported by a Heed Foundation Award and by a Heed-Knapp Award. As of July 1, Rob will join our Retina Service and also become principal investigator of the Reading Center for the Complications of AMD Prevention Trial (CAPT).

**Madhura A. Tamhankar, M.D.**
Madhura completed her medical studies at the University Hospital in Bombay, India and a neuro-ophthalmology fellowship at Scheie/Penn. She will begin her residency in Ophthalmology at Scheie in July 2004.

**David Young, M.D.**
David completed his residency at Brown before starting his pediatric ophthalmology fellowship at CHOP. He will return home to Hawaii to join a practice where he will specialize in pediatric ophthalmology and adult strabismus.

---

**Macular Degeneration . . . Continued from page 2**

Degeneration is an international resource. Its doctors and scientists are at the cutting edge of patient care, clinical investigation and basic research into the causes and possible treatments for macular degeneration, and firmly in position to bring this research directly to our patients and to patients around the world.

*By Michele Szkolnicki*
Retina Teaching Set Honors Memory of Physician-Scientist

After the untimely death in 2001 of Jeffrey W. Berger, M.D., Ph.D., Scheie Eye Institute established a memorial fund in his name. The Berger Fund supports summer fellowships and research meeting travel for medical students. Funds have been raised from individual donations and through sales of the Human Retina Teaching Set created by Ann H. Milam, Ph.D. This set is available for a donation of $125 and includes 31 clinical and microscope color photos of normal and diseased human retinas, a CD with all images for slide production and complete legends. A projection slide set is available for an additional $50. To date more than 120 sets have been purchased by institutions around the world, including Argentina, Austria, Australia, Brazil, Canada, Finland, Germany, Hungary, Israel, Japan, Spain, Switzerland, the UK and USA. Dr. Berger was an inspiring teacher, a creative scientist and a compassionate retina specialist. The Human Retina Teaching Set is one of many ways that we continue to honor his memory and his many contributions.

Foveal cones in a normal retina. Cone nuclei are red and rod nuclei are blue. Image from F.M. Kirby Confocal Microscopy Laboratory

Drusen (dark arrows) on Bruch’s membrane (white arrows). Image from F.M. Kirby Confocal Microscopy Laboratory

To order the Human Retina Teaching Set, please call or e-mail Ann Sacks at (215) 662-8774, ann.sacks@uphs.upenn.edu or send check payable to the Jeffrey W. Berger Memorial Fund to:

Scheie Eye Institute 
c/o Ann Sacks 
51 N. 39th Street 
Philadelphia, PA 19104

Human Retina Teaching Set: $125
Slide set: $50 Additional

www.penneye.com
Specialties & Services

**Applied Ophthalmic Neurobiology Laboratory**
Alan M. Laties, M.D.
Richard A. Stone, M.D.

**Center for Preventive Ophthalmology and Biostatistics**
Judy Alexander, B.A.
Mary Brightwell-Arnold, B.A.
Stuart L. Fine, M.D.
Maureen G. Maguire, Ph.D.
Ellen Peskin, M.A.

**Center for Hereditary Retinal Degenerations**
Tomas S. Aleman, M.D.
Artur V. Cideciyan, Ph.D.
Samuel G. Jacobson, M.D., Ph.D.

**Comprehensive Ophthalmology**
Lin Chen, M.D., Ph.D.
William C. Frayer, M.D. (Emeritus)
Mina Massaro-Giordano, M.D.
Charles W. Nichols, M.D.
Stephan E. Orlin, M.D.
Jane Z. Portnoy, M.D.
Prithvi S. Sankar, M.D.
Michael E. Sulewski, M.D.

**Contact Lens Service**
Diane Heistand, COT, NCLC, FNAO
Kathy McNels, COA, NCLC
Cynthia Silvestri, COA, NCLC

**Cornea/External Diseases/Refractive Surgery**
Stephen E. Orlin, M.D.
Michael E. Sulewski, M.D.

**F.M. Kirby Center for Molecular Ophthalmology**
Jean Bennett, M.D., Ph.D.
Joshua L. Duniaef, M.D., Ph.D.
Kristen Huang, Ph.D.
Edward N. Pugh, Ph.D.
Eric A. Pierce, M.D., Ph.D.
Dwight E. Stambolian, M.D., Ph.D.
Michael J. Tolentino, M.D.

**Genetics**
Dwight E. Stambolian, M.D., Ph.D.

**Glaucma**
Eydie G. Miller-Ellis, M.D.
Jody R. Piltz-Seymour, M.D.
Prithvi S. Sankar, M.D.
Richard A. Stone, M.D.

**Low Vision Research and Rehabilitation Center**
Janet DeBerry Steinberg, O.D.
Ranjoo Prasad, O.D.
Dawn Ciccarone, M.S., OTR/L

**Medical Retina**
Alexander J. Brucker, M.D.
Joshua L. Duniaef, M.D., Ph.D.
Stuart L. Fine, M.D.
Juan E. Grunwald, M.D.
Albert M. Maguire, M.D.
Michael J. Tolentino, M.D.

**Medical Therapies Initiative**
Alan M. Laties, M.D.
Rong Wen, M.D., Ph.D.

**Neuro-Ophthamology**
Laura J. Balcer, M.D.
Steven L. Galetta, M.D.
Grant T. Liu, M.D.
Nicholas J. Volpe, M.D.

**Neuroprotection Laboratory**
Alan M. Laties, M.D.

**Retinal Degeneration Histopathology Laboratory**
Ann H. Milam, Ph.D. (Adjunct)

**Strabismus-Adult**
Nicholas J. Volpe, M.D.

**Ultrasound**
Kym Gendron, R.O.U.B.

**Pathology**
Franz Fogt, M.D., Dr. med., MBA (Interim)
William C. Frayer, M.D. (Emeritus)
Robert L. Peiffer, Jr., DVM, Ph.D.

**Pediatric Oculohiplastic Surgery**
James A. Katowitz, M.D.

**Pediatric Ophthalmology**
Jane C. Edmond, M.D.
Brian J. Forbes, Ph.D., M.D.
Ellie L. Francis, O.D., Ph.D.
Monte D. Mills, M.D.
Eric A. Pierce, M.D., Ph.D.
Graham E. Quinn, M.D.
Terri L. Young, M.D.

**Photography**
Jim Berger
Cheryl Devine
William Nyberg
Laurel Weeney

**Retinal Degeneration**

**Uveitis**
Alexander J. Brucker, M.D.
Albert M. Maguire, M.D.

**Vitreoretinal Surgery**
Alexander J. Brucker, M.D.
Albert M. Maguire, M.D.
Michael J. Tolentino, M.D.

**Residents**
Gabrielle Bonhomme, M.D.
Damon B. Chandler, M.D.
Leonard Feiner, M.D., Ph.D.
Carolyn Glazer-Hockstein, M.D.
Jason Hsu, M.D.
Michael Ibara, M.D.
William Katowitz, M.D.
Leila M. Khazaeni, M.D.
Shane Kim, M.D.
Linda Rose, M.D., Ph.D.
Lisa Schockett, M.D.
Kenneth S. Shindler, M.D., Ph.D.
Paul J. Tapino, M.D.
Michael Tracy, M.D.
Wai Wong, M.D., Ph.D.

**Fellows**
Andrew Mohammed, M.D. / Glaucma
Fernida Kherani, M.D. / Oculoplastics
Madhura Tamhankar, M.D. / Neuro-Ophthamology
David Young, M.D. / Pediatric Ophthalmology
Robert A. Stoltz, M.D., Ph.D. / Retina

---

For patient appointments, call PENNHealth 1-800-789-PENN
Locations
Scheie Eye Institute/Presbyterian Medical Center
51 N. 39th Street, Philadelphia, PA
University of Pennsylvania Medical Center
34th and Spruce Streets, 2 Gates Building, Philadelphia, PA
Penn Medicine at Radnor
250 King of Prussia Road, Radnor, PA
Penn Center for Low Vision Rehabilitation and Research
3615 Chestnut Street, #114, Philadelphia, PA
Penn Eye Care at Mercy Fitzgerald
1501 Lansdowne Avenue, #208, Darby, PA

www.penneye.com
Scheie Eye Institute Faculty and Clinical Staff

Artur V. Cideciyan, Ph.D., Retina Research

Terri L. Young, M.D., Pediatric Ophthalmology

Richard A. Stone, M.D., Vice Chairman, Research Glaucoma

Michael J. Tolentino, M.D., Retina & Vitreous, Retina Research

Nicholas J. Volpe, M.D., Neuro-Ophthalmology, Motility/Strabismus (Adult)

Jane Z. Portnoy, M.D., Comprehensive Ophthalmology

Edward N. Pugh, Ph.D., Retina Research

Graham E. Quinn, M.D., Pediatric Ophthalmology

Prithvi S. Sankar, M.D., Glaucoma, Comprehensive Ophthalmology

Dwight E. Stambolian, M.D., Ph.D., Genetics Research

Ellie L. Francis, O.D., Ph.D., Pediatric Optometry

William C. Frayer, M.D., Pathology

Brian J. Forbes, M.D., Ph.D., Pediatric Ophthalmology

Steven L. Galetta, M.D., M.D., Neuro-Ophthalmology

Roberta E. Gausas, M.D., M.D., Oculoplastic & Orbital Surgery, Cosmetic Surgery

Jean E. Grunwald, M.D., Medical Retina, Retina Research

Kristen Huang, Ph.D., Retinal Degeneration, Genetics Research

Samuel G. Jacobson, M.D., Ph.D., Hereditary Retinal Degeneration, Surgery

James A. Katowitz, M.D., Pediatric Oculoplastic Surgery

Ranjoo Prasad, O.D., Low Vision

Robert L. Peiffer, Jr., D.V.M., Ph.D., Pathology

Eric A. Pierce, M.D., Ph.D., Pediatric Ophthalmology, Genetics Research

Judy S. Piltz-Seymour, M.D., Glaucoma, Glaucoma Research

Ann H. Millam, Ph.D., Retina Research

Eydie G. Miller-Ellis, M.D., M.D., Pediatric Ophthalmology

Monte D. Mills, M.D., Comprehensive Ophthalmology

Robert L. Peiffer, Jr., D.V.M., Ph.D., Pathology

Eric A. Pierce, M.D., Ph.D., Pediatric Ophthalmology, Genetics Research

Judy S. Piltz-Seymour, M.D., Glaucoma, Glaucoma Research

Bob Hawthorne, O.D., Low Vision

Janet Dollery Steinhart, O.D., Low Vision

Richard A. Stone, M.D., Vice Chairman, Research Glaucoma

Michael E. Swelkoski, M.D., M.D., Cornea/External Diseases/Refractive Surgery

Michael J. Taliento, M.D., Retina & Vitreous, Retina Research

Nicholas J. Velpe, M.D., M.D., Neuro-Ophthalmology, Motility/Strabismus (Adult)

Rong Wen, M.D., Ph.D., Pediatric Ophthalmology

Terri L. Young, M.D., Ph.D., Pediatric Ophthalmology

Stuart L. Fine, M.D., M.D., Chairman and Director

Tomas S. Aleman, M.D., Hereditary Retinal Degeneration

Laura J. Balcer, M.D., Neuro-Ophthalmology, Epidemiology

Jean Bennett, M.D., Ph.D., Retinal Degeneration, Genetics Research

Alexander J. Brucker, M.D., Retina & Vitreous, Retina Research

Lin Chen, M.D., Ph.D., Comprehensive Ophthalmology, Retina Research

Robert E. Gausas, M.D., Oculoplastic & Orbital Surgery, Cosmetic Surgery

Jean E. Grunwald, M.D., Medical Retina, Retina Research

Kristen Huang, Ph.D., Retinal Degeneration, Genetics Research

Samuel G. Jacobson, M.D., Ph.D., Hereditary Retinal Degeneration, Surgery

James A. Katowitz, M.D., Pediatric Oculoplastic Surgery

Ranjoo Prasad, O.D., Low Vision

Robert L. Peiffer, Jr., D.V.M., Ph.D., Pathology

Eric A. Pierce, M.D., Ph.D., Pediatric Ophthalmology, Genetics Research

Judy S. Piltz-Seymour, M.D., Glaucoma, Glaucoma Research

Ann H. Millam, Ph.D., Retina Research

Eydie G. Miller-Ellis, M.D., M.D., Pediatric Ophthalmology

Monte D. Mills, M.D., Comprehensive Ophthalmology

Robert L. Peiffer, Jr., D.V.M., Ph.D., Pathology

Eric A. Pierce, M.D., Ph.D., Pediatric Ophthalmology, Genetics Research

Judy S. Piltz-Seymour, M.D., Glaucoma, Glaucoma Research

Bob Hawthorne, O.D., Low Vision

Janet Dollery Steinhart, O.D., Low Vision

Richard A. Stone, M.D., Vice Chairman, Research Glaucoma

Michael E. Swelkoski, M.D., M.D., Cornea/External Diseases/Refractive Surgery

Michael J. Taliento, M.D., Retina & Vitreous, Retina Research

Nicholas J. Velpe, M.D., M.D., Neuro-Ophthalmology, Motility/Strabismus (Adult)

Rong Wen, M.D., Ph.D., Pediatric Ophthalmology

Terri L. Young, M.D., Ph.D., Pediatric Ophthalmology
We look forward to welcoming our alumni, guests, faculty, and house staff to a scientific meeting that celebrates the 129th Anniversary of the Department of Ophthalmology at the University of Pennsylvania.

The program will be held in the Scheie Eye Institute Auditorium. Each session includes presentations by Scheie faculty, house staff and alumni. Our invited guests, Dr. Michael Repka and Dr. Michael Ip, will give featured presentations and discuss interesting cases with the participants.

**Friday, May 30, 2003**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30AM – 10:00AM</td>
<td>Registration</td>
</tr>
</tbody>
</table>
| 10:00 AM – 11:00 AM | Retinal Degeneration I
Chairs: Jean Bennett, M.D., Ph.D.
Samuel G. Jacobson, M.D., Ph.D. |
| 11:00 AM – 12:00 PM | Retinal Degeneration II
Chairs: Maureen G. Maguire, Ph.D.
Joshua L. Dunaief, M.D., Ph.D. |
| 12:00 PM – 1:00 PM | Lunch, 5th Floor Concourse                                           |
| 1:00 PM – 1:50 PM | Public Health Ophthalmology
Chair: William C. Frayer, M.D.                                       |
| 3:00 PM – 3:30 PM | Refreshment Break                                                     |
| 3:30 PM – 4:10 PM | Glaucoma
Chair: Jody R. Piltz-Seymour, M.D.                                   |
| 4:10 PM – 5:00 PM | Retina, Vitreous, and Macula I
Chair: Alan M. Laties, M.D.                                           |
| 3:00 PM – 3:30 PM | Refreshment Break                                                     |
| 3:30 PM – 4:10 PM | Glaucoma
Chair: Jody R. Piltz-Seymour, M.D.                                   |
| 4:10 PM – 5:00 PM | Retina, Vitreous, and Macula I
Chair: Alan M. Laties, M.D.                                           |
| 3:00 PM – 3:30 PM | Refreshment Break                                                     |
| 3:30 PM – 4:10 PM | Glaucoma
Chair: Jody R. Piltz-Seymour, M.D.                                   |
| 4:10 PM – 5:00 PM | Retina, Vitreous, and Macula I
Chair: Alan M. Laties, M.D.                                           |

**Saturday, May 31, 2003**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:15 AM – 8:00 AM</td>
<td>Breakfast and Registration, SEI Lobby</td>
</tr>
</tbody>
</table>
| 8:00 AM – 9:05 AM | Orbit and Oculoplastic Surgery
Chair: Roberta E. Gausas, M.D.                                      |
| 9:05 AM – 9:55 AM | Pediatric Ophthalmology
Chair: Monte D. Mills, M.D.                                         |
| 11:15 AM – 12:15 PM | Adjournment                                                          |

For more information or to register for the event, please contact Jenny Bartelle at 215-662-8069 or jenny.bartelle@uphs.upenn.edu or visit our website at www.penneye.com/html/cme_activities.html