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Chairman:
Thomas Mauger, M.D.

Administrator:
Robert LaFollette, M.B.A.

Outreach Director:
Laura Sladoje, B.S.

Program Coordinator:
Christina Stetson, B.A.

For more information contact Ophthalmology Outreach at (614) 293-8760 or eye@osu.edu.
Dear Friends and Colleagues,

The mission of The Ohio State University Medical Center is “To improve people’s lives through innovation in research, education and patient care”. In Ophthalmology we have a unique opportunity to improve the lives of others through the preservation of vision through research, education, clinical treatment, and surgery.

The Department of Ophthalmology continued its growth during the 2007–2008 academic year. Exciting developments have occurred in all three of our mission areas of clinical care, research, and education. As the medical center embarks on a one billion dollar expansion the Havener Eye Institute is also making plans for new physical facilities that should provide opportunities for additional growth. Plans include a new Eye Institute site to encompass our main clinical, research, and educational activities as well as an outpatient surgical facility. We are also planning to create additional outreach clinical space. We have made strategic additions to our faculty during the past year in the areas of comprehensive ophthalmology, vitreoretinal disease, and cornea and external disease. We are very fortunate to have a dedicated and caring team of administrative and clinical staff that support each element of our mission.

Thanks to Dr. Paul Weber, the medical student lecture series remains one of the highest ranked in the curriculum. Dr. Alan Letson has revised and improved the ophthalmology clerkship. Over five percent of the medical school class have selected ophthalmology as their career choice. The ophthalmology residency program remains the key element of our educational program. Applications to the residency program are at an all time high in terms of quantity and quality. Thanks to the efforts of Residency Program Director, Alan Letson, and Program Coordinator, Trish Rebish, along with all of the involved faculty and residents, the program was successfully recertified last year. The resident experience in surgical volume and patient encounters remains in the top 10% of programs. The faculty and residents will have new operating room facilities at Nationwide Children's Hospital, Chalmers P. Wylie Veterans Clinic (V.A.), as well as our main surgical facilities. The fellowship program remains active with fellows currently in cornea, glaucoma, and retina.

Research efforts continue to expand in the areas of ocular tumor, ocular biomechanics, and cerebrospinal fluid physiology. The Department has been very active in clinical trials involving age-related macular degeneration, diabetic retinopathy, glaucoma, ocular infections, and cataract surgery. The resident’s annual research program continues to improve in the quality of the research and presentations.

Healthcare is at a critical point in the United States and globally. It is our goal to contribute to the solution by training excellent physician leaders and by restoring sight and preventing blindness through state of the art patient care, education, and research.

Sincerely,

Thomas F. Mauger, M.D.
Director and Chairman
The Carl M. and Grace C. Baldwin Chair in Ophthalmology
Havener Eye Institute, Department of Ophthalmology, The Ohio State University
In 1914, Starling Ohio Medical College joined OSU and became The Ohio State University Medical College. At that time, Ophthalmology and Otolaryngology were a combined division. Recognizing the need for specialization, the Department of Ophthalmology was officially formed in 1929 under the leadership of Albert Frost, M.D. Patient care clinics were located on State Street and at Children’s Hospital. Surgery remained at University Hospitals. Medical students attended the outpatient clinic on State Street. In 1938, the State Street clinic was moved to the University Hospitals. In 1949, the eye clinic occupied a small space adjacent to the old emergency room. In 1959, when Dr. Havener became the first full-time ophthalmologist at Ohio State, the eye clinic consisted of a large central room for interviewing and refracting patients, a treatment room, a small classroom, and a visual field room. Between 1949 and 1962, the number of patients grew from 1900 to 16,000. Because of this increasing demand, the Department took up residence in the newly constructed Outpatient Clinic Building in 1975. To meet the needs of Columbus’ increasing suburban population, the Department established a satellite clinic in 1996 for refractive surgery, anterior segment, neuro-ophthalmology, and comprehensive eye care. This clinic as located at Stoneridge Medical Plaza near the northeastern suburb of Dublin, but moved to its current location in Dublin in 2006. That same year, an additional clinic for retinal and glaucoma patients was established across the street.
HAVENER EYE INSTITUTE IN 2009

In the summer of 2009, the Department of Ophthalmology will move from the OSU Medical Center campus to a new location across the Olentangy River. With over 28,000 square feet, patient exam facilities equipped with innovative technology, and a state-of-the-art surgery center we will be able to meet the growing demand for quality eye care. In its 80th year, the Havener Eye Institute will continue establishing a tradition of excellence in ophthalmology.
The Annual Honor Roll and Havener Society acknowledge those who support the educational and research mission of the department. Our vision is to expand research to increase options for treatment and prevention of eye diseases, to share the latest advances and innovations in eye care with our patients, and to train the next generation of ophthalmologists to carry on the tradition of excellence. This includes funds donated for resident and fellow salary support, equipment used by residents and students in clinic, student and resident educational programming, books for the resident lecture series, named lectureships, and support of chairs and faculty positions.

**$100,000 and above**
- Warner & Patti Blow
- Dr. Henry & Suzanne Croci
- Dr. Halton C. Letson

**$50,000 to $99,999**
- Dr. Holton C. Letson
- Harry Esbenshade

**$10,000 to $49,999**
- Jerry Colp
- Dr. D. M. Nisbet
- Dr. Dale & Bonnie Solze

**$5,000 to $9,999**
- Drs. Jack & Candace Hendershot
- Dr. Carl & Joan Minning

**$2,500 to $4,999**
- Dr. Dave & Cheryl Adam
- Dr. Patrick Carroll
- Dr. Carl Shin

**$1,000 to $2,499**
- Dr. James Moses
- Dr. Baird Pfahl
- Dr. John J. Wilding
- Dr. John J. Wilding

**$500 to $999**
- Dr. D. M. Nisbet
- Dr. Carl & Joan Minning

**$100 to $499**
- Dr. Max J. Lerner
- Bill Martin
- Dr. Jeff & Sue McAdoo
- Kathy McKinney
- Dr. Randy McLaughlin
- Tim McNemar
- Martha Morris
- Frank New
- Dr. Alfred Nicely
- Fred & Cheryl Nicely
- Dr. Phillip O’Donnell
- Pam Potter
- Floyd & Patricia Redd
- Lee Rudibaugh
- Michael Sauer
- Charles Sauer
- T. Dwain Sayre
- Nasser Sharifrazi
- Dr. Jerry Shell
- B. Lee Skilken
- Laura Sladoje
- Dr. John Stechshulte
- Michael Steyer
- Dr. Michael Stone
- Dr. Paul Treger
- Dr. Paul Weber
- Lisa Williamson
- Dr. Jeffrey Wincko
The Havener Society was established in 1989 by the students of William Havener to perpetuate the principles and high standards that he set for himself and for the students and benefactors of his talents.

William H. Havener, MD was the first full-time ophthalmologist at The Ohio State University College of Medicine and Public Health and Chairman of the Department of Ophthalmology from 1959-1961 and 1972-1988. A distinguished teacher and internationally known author, Dr. Havener was an innovative and skillful surgeon, thoughtful citizen, an avid gardener, and most of all, a considerate and caring physician. Dr. Havener believed in planting things and watching them grow. He loved to plant seeds, whether in his garden or by nurturing medical students, residents, and faculty.

For four decades, he had a single mission: Ophthalmology. With his keen powers of observation and unique ability to transmit knowledge to others, as an educator, he had no peer. He was directly responsible for the training of over 200 ophthalmologists and thousands of medical students. The great planter of seeds is gone, but his harvest will continue to be bountiful.

* Indicates deceased
**Fellow Circle**

$50,000 - $99,999

- Dr. N. Douglas Baker
- Dr. John Burns
- Dr. Kenneth Cahill
- Jerry R. Colp
- Dr. Henry & Suzanne Croci
- Dr. Frederick Davidorf
- Leo & Grace Faust*
- Margery Henderson*
- Dr. Roger C. Henderson*
- Gayle Huffman*
- Eleanor Kilgore*
- Dr. Richard H. Keates
- Mary K. Laughlin*
- Dr. Alan Letson
- Dr. Holton Letson
- Dr. Torrence Makley*
- Dr. Thomas Mauger &
  Dr. L. Carol Laxson
- Ruby Nowak*
- Ruth Tankersley*
- Eldon J. Tobias*

**Resident Circle**

$25,000 - $49,999

- Dr. Robert Chambers
- Helen Clabaugh*
- Helen Crane*
- Drs. Jack &
  Candace Hendershot
- Dr. Marilyn J. Huheey
- Katherine Kessler*
- Dr. Robert Magnuson*
- Dr. Robert & Helen McKinlay
- Lois Ann Moor
- Dr. Alfred Nicely
- Dr. Dick Nisbet
- Dr. Karl Pappa
- Dr. John Stechschulte
- Dr. Dale & Bonnie Solze
- Elmer Tankersley*
- Dr. Paul Webber

**Student Circle**

$10,000 - $24,999

- Dr. David Adam
- Dr. Donald Anderson
- Dr. James Andrew*
- Dr. Paul Armstrong
- Dr. William Banks III
- Dr. Morris Battles*
- Dr. Susan Benes
- Dr. James Bennett*
- Joseph L. Bitonte*
- Dr. Wilbur Blount*
- Dr. Hans Bredemeyer
- Dr. Robert Bruce*
- Dr. Robert Bruce, Jr.
- Howard Burnett
- Dr. Patrick Carroll
- Dr. Elson Craig
- Dr. Robert Derick
- Dr. Jack Dingle
- Gladys Dunlap*
- Gilbert Eggleston
- Harry Esbenshade, Jr.
- Dr. Sanders Farber
- Dr. John Charles Garvin
- Edward Gerhold, Sr.*
- Dr. Gregory Gibb
- Florence Johnson*
- Dr. Fred &
  Audrey Kapetansky
- Dr. John D. Kay
- Dr. Curtin Kelley
- Dr. Charles Kunesh*
- Dr. Richard Lembach
- Dr. Jerrold Levin
- Dr. Donald Lewis
- Dr. John Mader
- John L. Marakas
- Dr. W. Thomas Martin
- Dr. Randy McLaughlin
- Timothy McNemar
- Ann E. Meiling*
- Dr. Carl Minning, Jr.
- Dr. James Moses
- Marlene O’Dair
- Dr. Robert O’Dair*
- Dr. E. Mitchel Opremcak
- Dr. Richard Orlando
- Dorothy Osborne
- Maude Osborne*
- Dr. Paul Richards
- Mrs. Ermal Roberts
- Mary Ellen Sharshal
- Dr. Carl Shin
- Dr. Richard Simmons
- Dr. James Stewart
- Dr. Ted Suie, Jr.*
- Dr. Lloyd Taustine
- Patti Tewell
- Dr. Peter Utrata
- Dr. Albert Van Fossen
- Dr. Joel Wachtel*
- Dr. Charles Zepp
- Harold F. Zieg*
According to Dr. Henry Croci, “the educational experience as an ophthalmology resident shaped our lives in such a positive way, we wanted to be able to help future residents experience the same thing.” That motivated Dr. Croci and wife Suzanne to create the The Henry G. Croci and Suzanne D. Croci Resident Education Fund in Ophthalmology, established in December 2007. He continued, “The example by Dr. Havener and other faculty and staff influenced the way we interact with patients and people in general throughout our lives. We want to continue to encourage young ophthalmology residents to foster the same spirit of kind, compassionate help to others.” The annual distribution of this fund shall be used to support the education and training of residents in the Department of Ophthalmology. “Resident education is one of the strengths at OSU and continues to improve thanks to the generosity of donors like the Crocis,” stated Chief Resident, Matthew Ohr, M.D.

After Dr. Croci completed his residency internship and two years in the Air Force as a Flight Surgeon, the Crocis settled in Athens, Ohio in 1971, where he practiced for more than 31 years. Dr. Croci and Suzanne relocated to Savannah, Georgia five years ago after his retirement. They enjoy the warmer winters and natural beauty of Coastal Georgia. Dr. Croci continues to volunteer in ophthalmology, helping with the Lions Lighthouse Foundation at St. Mary Community Center. As a licensed volunteer in medicine in Georgia he examines and treats uninsured and under served patients two full days a month.
Holton Letson, M.D.
Retina and Ophthalmology Endowment Established to honor Alan & Susan Letson

The Alan and Susan Letson Retina and Ophthalmology Fund was established in 2007 by an endowment gift from Dr. Holton Charles Letson of Hilton Head, South Carolina. Dr. Letson created the fund to recognize the professional contributions of his son, Dr. Alan, and daughter-in-law Susan Letson. “I staffed the OSU Ophthalmology resident clinic for many years,” said Dr. Letson. “Even when no longer staffing clinic, I maintained a close relationship with the Department and staff, particularly Dr. William Havener. It was a pleasure and a privilege to provide in a positive manner to the field of Ophthalmology. Now that I can no longer physically take part, I can take pleasure through the establishment of this fund which I hope will continue my efforts, and also the efforts of others.” The annual distribution from this fund will be used to support the education of ophthalmology residents, acquisition of equipment for research, clinical and patient care, projects in retina disease, and emerging priorities or initiatives related to retina disease in the Department of Ophthalmology. According to Dr. Tom Mauger, Department Chairman, “Private support for our department and programs are critical to our continued growth and expansion. The generosity of Dr. Letson and all our donors is greatly appreciated and truly makes a difference in what we do.”

After completing his residency in Ophthalmology in Detroit, Dr. Letson moved his family to Zanesville, Ohio where he practiced Ophthalmology from 1954 until his retirement in 1986. He spent more than 15 years staffing the OSU Resident Clinic and made many valuable contributions to the profession, the department and many grateful resident trainees.
# Faculty (July 2007 - June 2008)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Thomas Mauger, M.D.</td>
<td>Department Chair</td>
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<tr>
<td>David Castellano, M.D.</td>
<td>Assistant Professor - Clinical Refractive Surgery</td>
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<tr>
<td>Susie Chang, M.D.</td>
<td>Assistant Professor</td>
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<tr>
<td>John Christoforidis M.D.</td>
<td>Assistant Professor</td>
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<tr>
<td>Elson Craig, M.D.</td>
<td>Associate Professor Emeritus</td>
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<tr>
<td>Matthew Dangel, M.D.</td>
<td>Associate Professor</td>
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<tr>
<td>Frederick Davidorf, M.D.</td>
<td>Professor Emeritus</td>
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<tr>
<td>Gloria Fleming, M.D.</td>
<td>Assistant Professor - Clinical Glaucoma</td>
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<tr>
<td>Deborah Grzybowski, Ph.D.</td>
<td>Assistant Professor Research</td>
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<tr>
<td>Reynell Harder Smith, M.D.</td>
<td>Assistant Professor - Clinical Anterior Segment</td>
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<tr>
<td>David Hirsh, M.D.</td>
<td>Assistant Professor - Clinical Neuro-Ophthalmology</td>
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<tr>
<td>Steven Katz, M.D.</td>
<td>Associate Professor - Neuro-Ophthalmology</td>
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<tr>
<td>Richard Keates, M.D.</td>
<td>Professor Emeritus</td>
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<tr>
<td>Carol Laxson, M.D., Ph.D.</td>
<td>Assistant Professor - Clinical Retina</td>
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<tr>
<td>Richard Lembach, M.D.</td>
<td>Professor - Clinical Anterior Segment</td>
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<tr>
<td>Alan Letson, M.D.</td>
<td>Professor - Clinical Retina</td>
</tr>
<tr>
<td>Jennifer Lewis, Ph.D.</td>
<td>Adjunct Assistant Professor Research</td>
</tr>
<tr>
<td>Jun Liu, Ph.D.</td>
<td>Assistant Professor Research</td>
</tr>
<tr>
<td>W. Randall McLaughlin, O.D.</td>
<td>Assistant Professor - Clinical Optometry</td>
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<tr>
<td>Cynthia Roberts, Ph.D.</td>
<td>Professor Research</td>
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<tr>
<td>Amit Tandon, M.D.</td>
<td>Clinical Assistant Professor Comprehensive</td>
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<tr>
<td>Annette Terebuh, M.D.</td>
<td>Clinical Assistant Professor Glaucoma</td>
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<tr>
<td>Paul Weber, M.D.</td>
<td>Professor Glaucoma</td>
</tr>
<tr>
<td>Katie Wulff, O.D.</td>
<td>Clinical Assistant Professor Optometry</td>
</tr>
</tbody>
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Faculty Awards

America’s Best Doctors 2008
America’s Best Doctors Inc.
N. Douglas Baker, M.D.
Robin Beran, M.D.
Don Bremer, M.D.
Robert Bruce, M.D.
John Burns, M.D.
Kenneth Cahill, M.D.
Robert Chambers, D.O.
Louis Chorich, M.D.
John Christoforidis, M.D.
Matthew Dangel, M.D.
Frederick Davidorf, M.D.
Robert Derrick, M.D.
Jack Dingle, M.D.
Alice Epitropoulos, M.D.
Avrom Epstein, M.D.
Kelly Everman, M.D.
Jill Foster, M.D.
Steven Katz, M.D.
Curtin Kelley, M.D.
L. Carol Laxson, M.D.
Richard Lembach, M.D.
Alan Letson, M.D.
Mark Lomeo, M.D.
Thomas Mauger, M.D.
Mary Lou McGregor, M.D.
E. Mitchel Opremcak, M.D.
Gary Rogers, M.D.
John Stechschulte, M.D.
Peter Utrata, M.D.
Paul Weber, M.D.

Who’s Who in Black Columbus, 2008
Who’s Who Publishing
Gloria Fleming, M.D.

Makley-Battles Teaching Award, 2008
Havener Eye Institute, OSU
David Hirsh, M.D.

2008 New Faculty

Rebecca Kuennen, M.D.
Clinical Assistant Professor
Anterior Segment

Paul Kurz, M.D.
Assistant Professor
Retina

Hall McGee, M.D.
Assistant Professor
Anterior Segment

Julie Meier, M.D.
Clinical Assistant Professor
Anterior Segment

Clinical Faculty

Faculty Emeritus
Hans Bredemeyer, M.D.
Martin Lubow, M.D.
Harry Sage Jr., M.D.

Clinical Professors
Susan C. Benes, M.D.
John A. Burns, M.D.
Kenneth V. Cahill, M.D.
Frederick Kapetansky, M.D.
Gary L. Rogers, M.D.

Clinical Associate Professors
Don L. Bremer, M.D.
Robert A. Bruce, M.D.
Robert Chambers, D.O.
Robert J. Derick, M.D.
Jack Dingle, M.D.
Jill A. Foster, M.D.
John W. Higbee, M.D.
Curtin G. Kelley, M.D.
Lawrence E. Leguire, Ph.D.
Robert L. Lembach, M.D.
Robert T. McKinlay, M.D.
E. Mitchel Opremcak, M.D.
Roger H. Sherman, M.D.
Richard E. Simmons, M.D.
George Stine, M.D.
Peter J. Utrata, M.D.

Assistant Professors
Ronald X. Xu, Ph.D.

Clinical Assistant Professors
David R. Adam, M.D.
Charlotte M. Agnone, M.D.
J. Geoffrey Allen, M.D.
N. Douglas Baker, M.D.
Kenneth Beckman, M.D.
Robert P. Bennett, M.D.
Michael Besson, M.D.
Kenneth A. Boyle, Jr., M.D.
Bruce Buerk, M.D.
C. Patrick Carroll, M.D.
Cybil Bean Cassady, M.D.
George M. Chioran, M.D.
Louis Chorich III, M.D.
Emer C. Collins, M.D.
Elliott Davidoff, M.D.
David E. Denlinger, M.D.
Alice T. Epitropoulos, M.D.
Avrom D. Epstein, M.D.
Kelly Everman, M.D.
Sanders M. Farber, M.D.
J. Charles Garvin, M.D.
Richard Golden, M.D.
Walter C. Hartel, M.D.
Fareed Hasan, M.D.
Charles J. Hickey, M.D.
Marilyn J. Huheey, M.D.
Marsha Kavanagh, M.D.
Kevin G. Kegler, M.D.
Steven M. Kirkham M.D.
Dino Klisovic, M.D.
Heather C. Koelling, M.D.
Susmitha P. Kolli, M.D.
Amy M. Kopp, M.D.
Marilyn K. Kosier, M.D.
John Kunesh, M.D.
Michael T. Kunesh, M.D.
Mark S. Law, M.D.
David M. Lehmann, M.D.

Charles Letson, M.D.
Richard Liston, M.D.
Mark Lomeo, M.D.
John L. Marquardt, M.D.
A. Marie Martinek, M.D.
Mary Lou McGregor, M.D.
James Machtdehyde, M.D.
Carl A. Minning Jr., M.D.
Jennifer A. Morrison, M.D.
James L. Moses, M.D.
Paul Moyer, M.D.
Jeffrey C. Oehler, M.D.
Richard G. Orlando, M.D.
John T. Pajka, M.D.
Karl S. Pappa, M.D.
Sugat Patel, M.D.
Abhik Ray-Chaudhury, M.D.
Archana V. Reddy, M.D.
Alan J. Rehmar, M.D.
Chester D. Ridenour, D.O.
David Rogers, M.D.
Nicholas Rogers, M.D.
Stephen C. Schumann, M.D.
Gregory Searcy, M.D.
Shahin Shahnafar, M.D.
James E. Silone, D.O.
Warren M. Sobol, M.D.
Brian R. Stahl, M.D.
John R. Stechschulte, M.D.
Deanna J. Stevens, M.D.
Steven H. Suh, M.D.
Annette Terebuh, M.D.
Phyllis Visocan, M.D.
Todd E. Whitaker, M.D.
Education

Residency Program
Residency Director
Alan Letson, M.D.
Program Coordinator
Trish Rebish

Grand Rounds
10 Specialty Grand Rounds
26 Case Presentation Grand Rounds

Annual Ophthalmology Research Symposium
June 13, 2007

Ophthalmology Award Recipients:
Residents:
First Place: Rick Whitehead, M.D.
Second Place: Kathy Baker, M.D.
Third Place: Landon Colling, M.D.

Graduate Students:
First Place: Craig Morin, B.S.

Makley-Battles Teaching Award* Recipient:
David Hirsh, M.D.

Fellows
Ryan F. Deasy, M.D.
Rebecca Kuennen, M.D.
Carrie Lembach, D.O.

*The Makley-Battles Teaching Award is given annually in recognition of outstanding faculty contributions to resident education.
Anterior Segment

Thomas F. Mauger, M.D.

The Anterior Segment Division includes the areas of Cornea and External Disease, Comprehensive Ophthalmology, Optometry, and Refractive Surgery. The division is actively involved in teaching, research, and clinical care.

Drs. Amit Tandon and David Castellano provided comprehensive ophthalmic care to the university community and at our outreach clinics. They are integral to our resident clinical and surgical education on campus and through the Columbus VA clinic. They also provide outstanding role models of comprehensive ophthalmology to our residents and medical students. Dr. Katie Wulff joined the department to provide optometric care, including comprehensive examination, contact lens services, and low vision rehabilitation services to patients at the Dublin office. Dr. Randy McLaughlin continues to provide comprehensive examination and contact lens services at the OSU office. Drs. Wulff and McLaughlin are both involved in education.

The Cornea Service remains active performing 171 keratoplasty procedures during the past year. These procedures include a wide range of procedures including penetrating keratoplasty, endothelial keratoplasty, deep anterior lamellar keratoplasty, and keratoprosthesis. The service currently includes Drs. Richard Lembach, Richard Keates, Matthew Dangel, and Thomas Mauger. The newest addition to the service is Dr. Rebecca Kuennen who completed her cornea fellowship with Dr. Mauger in June 2008. Dr. Carrie Lembach also completed a cornea fellowship under the guidance of Dr. Richard Lembach in June 2008 and is in private practice in Columbus. Dr. Matthew Ohr was the Chief Resident in Ophthalmology and is the current cornea fellow for 2008-2009.

The division is completing clinical research projects on acute conjunctivitis, fungal and acanthamoeba keratitis, capsular staining in cataract surgery, and intra-operative corneal topography. Dr. Richard Keates is conducting a cornea cross-linking trial using riboflavin and UV light in eyes with keratoconus and corneal ectasia post-refractive surgery.

The Division has been involved in two international missions. Drs. Ohr and Mauger performed fifty cataract and pterygium surgeries in the village of Akima Akosa, Ghana in December 2007. Drs. Kuennen and Mauger traveled to Managua, Nicaragua in June of 2008 and performed fourteen successful keratoplasty procedures. The surgeries were made possible through a generous donation of corneal tissue from Tissue Banks International and Vision Share.
Neuro-Ophthalmology

Steven Katz, M.D.

The Neuro-ophthalmology service continues to contribute to the departmental mission in the core areas of clinical care, teaching and research. Departmental faculty including David Hirsh, Susan Benes and Steven Katz are responsible for the resident lecture series as well as medical student teaching in neuro-ophthalmology. Dr. Hirsh hosted the 51st Annual Postgraduate Symposium in Ophthalmology, The Eye and Systemic Disease, from February 29 through March 1, 2008. At the conference, Dr. Hirsh also spoke on Initiating Treatment for Giant Cell Arteritis and Dr. Katz gave the Paul A. Weber Lecture on Systemic Inflammatory Diseases of the Orbit. At the 28th Annual Ophthalmology Research Symposium on June 13, 2008, Dr. Hirsh was honored by the Residents with the Makley-Battles teaching award. Chief Resident Andy Hendershot cited Dr. Hirsh’s dedication to the Resident teaching program and his clinical teaching in the Resident Clinic at Ohio State and the Columbus VA.

Dr. Katz co-hosted a symposium on Headache Management on February 2, 2008 at Ohio State where he also gave an update on Idiopathic Intracranial Hypertension. He also co-directed the Intracranial Hypertension Research Foundation Patient Conference at the University of Texas in Houston on June 21-22, 2008. Dr. Katz gave lectures on diagnosis, medical management and optic nerve sheath fenestration at the conference. Dr. Katz serves as a scientific advisor for the foundation and regularly sees problem patients nationally who are referred through the foundation. He had three publications in peer reviewed journals in the past year and was a manuscript reviewer for the journals Ophthalmic Plastic & Reconstructive Surgery and Eye. Dr. Katz was a grant reviewer for eye and vision research for the American Institute of Biological Sciences and United States Army Medical Research and Material Command (as part of the Congressionally Directed Medical Research Program). He also reviewed grants for the Ann Ellis Fund at the Columbus Foundation. In 2008, Dr. Katz was again selected for Best Doctors in America by his peers.

Glaucoma

Paul A. Weber, M.D.

The Glaucoma Division has moved forward in a very positive way in all three mission areas: patient care, research, and education. Thanks to the generous continued support from grateful patient Jerry Colp, we have added state-of-the-art diagnostic equipment, the Optovue Optical Coherence Tomographer. This advanced technology allows us to diagnose glaucoma at the very earliest stages of the disease and can detect progression earlier than other methods, allowing us to provide optimum care of this potentially blinding disease for our patients. We have also expanded patient care options with Dr. Gloria Fleming now seeing patients at our Dublin location.

We continue to be involved in the National Eye Institute funded Ocular Hypertension Treatment Study (OHTS), a ground breaking study that has already altered how physicians here and around the world manage glaucoma. Many cases of glaucoma will be prevented, because of this clinical trial. This will result in fewer patients losing vision from one of the leading causes of blindness both nationally and internationally. The OHTS study has also resulted in new unexpected results that have stimulated new areas of research that will further advance the care and management of glaucoma. Collaboration between the Glaucoma Division and the Biomedical Engineering faculty has resulted in very robust research efforts in many of these areas. We have involved medical students, graduate students, residents and undergraduate students in these research projects. Our research efforts resulted in multiple presentations at this years ARVO meeting, the most influential ophthalmology research meeting.

We have expanded our education efforts for residents by adding glaucoma faculty at both the Columbus and Dayton VA facilities. These additions are resulting in more glaucoma clinical and surgical experience for our residents. The addition of a glaucoma fellow, Dr. Iyad Azrak, this year also enhances our educational efforts. Altogether, this has been a year of innovations and growth in the field of Glaucoma.
Central Ohio Lions Eye Bank

This year the Central Ohio Lions Eye Bank continued to successfully build its program of providing pre-cut corneas for DSAEK. Over 200 corneas have been pre-cut for transplants since the service was initiated. During 2007-08, the Eye Bank provided a total of 395 corneas, and sclera for nine surgeries. Donor eyes for research and training continue to be provided with approved applications. Also this year, the Eye Bank passed inspection by the FDA, and was inspected and recertified by the Eye Bank Association of America, receiving the EBAA’s highest accreditation rating. The Eye Bank presented over 100 public and professional educational programs during the year, including a certification course for new remote enucleators. More than 200 Lions volunteers continue to support the organization. Ophthalmologists on the Central Ohio Lions Eye Bank’s Board of Trustees are Thomas Mauger, M.D., Chairman of OSU Department of Ophthalmology; Richard Lembach, M.D., who has served as the Eye Bank’s Medical Director since 1989; and John Stechschulte, M.D., who serves as Associate Medical Director. More than 20 ophthalmologists now routinely use the Eye Bank’s services. Industry support for the Eye Bank this year included a sustaining gift of $10,000 from Allergan, and an operating microscope donated by Carl Zeiss Meditec.

Oculoplastic Fellowship

Kenneth Cahill, M.D.

The Oculoplastic Service is committed to excellence in clinical care, research and teaching. Active participation in medical school teaching occurs in core curriculum instruction, physical diagnosis instruction, clinical rotations, elective rotations, and research projects. Resident teaching is organized with didactic lectures, weekly staffing of an Oculoplastic Clinic at the OSU campus, weekly surgery and clinic for ophthalmic plastic surgery during the second year pediatric rotation, and third year resident Oculoplastic Surgery rotations. The American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) Fellowship program compliments the residency teaching program, and provides additional educational and research resources to the residents.

Members of the Oculoplastic service are John Burns, M.D., Kenneth Cahill, M.D., Kelly Everman, M.D., Jill Foster, M.D., Steven Katz, M.D., Kevin Michaels, M.D., and James Moses, M.D. Local and national instructional courses are presented in oculofacial surgery, pediatric oculoplastics, cosmetic facial surgery, blepharospasm, thyroid eye disease and ptosis. Research presentations and publications during this past year included topics of ptosis, the lacrimal outflow system, minimally invasive surgery, the use of tissue glue in place of sutures and cosmetic facial surgery.
Refractive Surgery

David Castellano, M.D.

The Refractive Surgery Division continues to see success from utilizing the combination of both the IntraLase femtosecond (FS) laser and the Custom Cornea/LADARVision platform from Alcon.

The IntraLase FS laser creates a much thinner, bladeless corneal flap which has proved useful in LASIK treatments by preserving more corneal tissue. Custom Cornea technology enables us to improve the quality of visual outcomes by taking into account higher-order aberrations of the eye which can cause problems in low-light conditions.

Using these lasers, our patients are able to get a truly individualized treatment which provides excellent visual acuity and quality results. Fairly high degrees of myopia, hyperopia and astigmatism are currently treatable as well as monovision/blended vision correction for patients over 40 with presbyopia.

Another new addition to the Refractive Surgery Division are toric and multifocal intraocular lenses. The toric intraocular lenses allow patients to obtain astigmatism correction during cataract surgery and the multifocal lenses are used to correct both distance and near vision. We are looking forward to adding intraocular contact lenses for patients with very high degrees of myopia.

Pediatrics

Gary L. Rogers, M.D.

Outpatient clinic visits increased again this year to 8630 patient visits. The clinic continues to be staffed by three residents from The Ohio State University.

Surgically, the Department of Ophthalmology also continues to be extremely active. In the year 2007-2008, 3022 ophthalmologic surgical procedures were performed at Nationwide Children’s Hospital. Ophthalmology performed the greatest number of cases in the Children’s Surgery Center.

The department participates in both funded and unfunded research. The Early Treatment for Retinopathy of Prematurity (ETROP) investigators have completed the 6 year exams with 100% follow-up. Several amblyopia protocols and a randomized nasolacrimal duct study are being conducted in association with the Pediatric Eye Disease Investigator Group (PEDIG). Dr. Don Bremer is the Principal Investigator for these PEDIG trials. Larry Leguire, Ph. D., continues to work with the OSU Department of Ophthalmology in functional MRI research with an interest in congenital ocular motor nystagmus. An eye tracker in the MRI scanner has been acquired for these studies. Dr. David Rogers has been active in clinical research with a special interest in corneal topography in children under anesthesia.

We are working with the hospital to increase the amount of space for both the laboratory and the clinic. It is our goal to be a leader in the research of fMRI and changes to the visual cortex in patients with amblyopia and nystagmus. PEDIG has recognized our previous research with sinemet and amblyopia and has started a multi-center study in amblyopia involving the treatment of older children with amblyopia using a similar levodopa-carbidopa combination.
Research

Cynthia Roberts, Ph.D.

The Research Division spans all subspecialties of Ophthalmology, and includes not only the faculty, but also programs that involve residents, graduate students, and medical students in the scientific process. For the academic year 2008, the Department of Ophthalmology received 13 new research awards and continued work on 24 multiple year grants. These awards focused on: age related macular degeneration, corneal biomechanics in normal and pathologic eyes, diabetic macular edema, retinal vein occlusion, glaucoma, idiopathic intracranial hypertension, bacterial conjunctivitis, fungal keratitis, managing ocular hypertension, and others. Funding sources included the National Institutes of Health/National Eye Institute, the Columbus Foundation, and the Ohio Lions Eye Research Foundation, as well as numerous industry awards. The research findings produced several peer reviewed publications, and were reported in multiple presentations at a variety of Ophthalmology related conferences around the world, including the American Academy of Ophthalmology and ARVO, which is the major international scientific meeting for vision research and is held annually in Florida. The resident research program exposes the residents to the scientific research process by involving them with a faculty mentor in either basic science or clinical studies. Many residents choose a project that spans all three years of their residency to allow adequate time for a fully developed project. All residents, fellows, and medical students are encouraged to attend ARVO and present their research.

Graduate students in either an M.S. or Ph.D. program are advised by either Cynthia Roberts, Ph.D., or Deborah Grzybowski, Ph.D. in their vision-related research. In addition, one of our affiliated faculty, Jun Liu, Ph.D., also advises graduate students in vision research.

Many small research projects are supported by the Ohio Lions Eye Research Foundation, from which the department receives an annual endowment. The past year has witnessed many accomplishments in the Research Division, accomplishments that reveal new questions to be asked and answered.

Retina

Alan D. Letson, M.D.

The Retina Division faculty for the 2007-2008 academic year included John Christoforidis, MD, Susie Chang, MD, Fred Davidorf, MD and Alan Letson, MD. Dr. Chang joined the faculty in October of 2007. Dr. Chang is a graduate of The Ohio State University College of Medicine, completed her Ophthalmology Residency at the Cole Eye Institute and her Retina Fellowship at Massachusetts Eye and Ear. Patient care activity included over 13,600 patient visits, over 12,000 diagnostic imaging procedures for the division and the department, including OCT, Fluorescein Angiography, Diagnostic Ultrasound and Fundus Auto Fluorescence. The physicians performed over 1,200 vitreo-retinal procedures, not including intravitreal injections. Our PDT equipment was updated at our Dublin facility. New Fundus Auto Fluorescence equipment was purchased. Fred Davidorf managed the ocular oncology portion of the service with a steady inflow of ocular melanoma patients.

Research efforts increased significantly during the year. Led by research manager, Laura Sladoje and clinical coordinators Jill Salerno, Jill Milliron and Joy Elliot, the division was actively involved in studies sponsored by National Eye Institute/National Institutes of Health, Genentech and EyeTech. AREDS 2 recruitment was completed in June 2008, and recruitment for 6 other clinical trials was carried out through this fiscal year. Scott Savage and his team of photographers of Steven Shelley and Amanda Barnett contributed to imaging for these retinal trials as well as other trials performed by other departmental divisions. In addition to the sponsored clinical trials listed below, Fred Davidorf continued his research in ocular melanoma and John Christoforidis has been developing high resolution MRI for ocular diseases in conjunction with the radiology department.

The division maintained its teaching activity by supporting two retinal fellows, Ryan Deasy, MD and Mark Barsamian, DO and working with residents in their first and second year retina rotations. Dr. Laxson, Dr. Chang and Dr. Craig are also participating at the Columbus VA Clinic. We have medical students rotate on the service. Retina faculty deliver weekly retina lectures to residents and hold imaging conferences with residents and fellows. The faculty also serves as preceptors for resident research projects and is active in the curriculum of the College of Medicine.
Detecting Cancer Cells in the Bloodstream of Patients with Ocular Melanoma
Frederick Davidorf, M.D. and Mohammed Abdel-Rahman, M.D., Ph.D.

Ocular melanoma can be fatal to patients by spreading to the liver, a process called metastasis. In order to spread from the eye to the liver, the cancer cells break free from the eye tumor, travel in the bloodstream, and take up residence in the liver. Approximately half of the patients with ocular melanoma develop liver metastases. This project centered on detecting cancer cells in the bloodstream of patients with ocular melanoma. We hypothesized that if a patient has cancer cells in the bloodstream, it is likely that they are at high risk for developing metastases later. First, we developed a test to detect cancer cells in the bloodstream. We used a test that could detect molecules that are only found in melanoma cells. If the test detected one of those molecules in the blood sample, we knew it was from a melanoma cell. Next, we used that test to detect melanoma cells in blood samples of 46 ocular melanoma patients and 30 normal patients. All of the normal patients had negative tests, showing that our test is accurate. Three of the ocular melanoma patients had melanoma cells in their blood samples. Of the two melanoma patients who developed metastases after their blood was drawn, one of them (50%) had cancer cells in their bloodstream. Of the 39 melanoma patients who have not developed metastases, one of them (3%) had cancer cells in their bloodstream. In future experiments, we will have to take larger and/or more frequent blood samples in order to reliably detect cancer cells. However, these results are a promising demonstration that we can detect cancer cells in the blood and that their presence likely indicates a high risk status for developing metastases.

Determining the Optical Quality and Impact Resistance of Nike and Oakley Football Helmet Face Shields – Steven E. Katz, M.D., Randy McLaughlin, O.D., Aaron Zimmerman, O.D. and Gregory Good, O.D., Ph.D.

A collaborative study between the Department of Ophthalmology and the College of Optometry has found that the two most commonly used football face shields are durable and have excellent optical quality that meets industry standards. The study on brand new face shields was published in Optometry, the official journal of the American Optometric Association in August, 2008. Mounted face shields were subjected to direct impact from baseballs shot out of an air cannon at speeds up to 218 feet per second. These findings are significant given that a 1993 study reported on more than 2,000 football-related eye injuries in subjects under the age of 25. Ongoing work (unpublished data) testing face shields that have been used for one year has shown that both the optical quality and the durability are significantly diminished. Game worn shields are very likely to crack or shatter with multiple projectile fragments at impact that may be encountered on the football field. The goal of this ongoing research is to establish criteria for equipment managers on when to replace worn face shields in order minimize the risk of ocular damage.
Grants

JA Burns (PI), KV Cahill, JA Foster. Evaluation of botulinum A toxins antigenistic characteristics, Merz Pharmaceuticals, 2006-08.

RB Chambers (PI), FH Davidorf, LJ Chorich, AD Letson. A phase IIIb, single masked, multicenter, randomized study to evaluate the safety and tolerability of ranibizumab in naive and previously treated subjects with choroidal neovascularization (CNV) secondary to age-related macular degeneration (AMD) (SAILOR). Genentech Pharmaceuticals, 2005-07.

RB Chambers (PI), LJ Chorich, FH Davidorf, AD Letson. Safety assessment of intravitreal Lucentis for AMD: a phase IIIb multicenter study to evaluate the safety and tolerability of ranibizumab (0.3 mg and 0.5 mg) in naive and previously treated subjects with CNV secondary to AMD (SAILOR II). Genentech Pharmaceuticals, 2006-07.

RB Chambers (PI), FH Davidorf. Phase IIIb randomized, double-masked, sham controlled, multi-center study comparing photodynamic therapy with Verteporfin (Visudyne) plus two different dose regimens of intravitreal pegaptanib (Macugen) in patients with subfoveal choroidal neovascularization secondary to AMD (VERITAS). Novartis Pharmaceuticals, 2005–08.


FH Davidorf (PI), MH Abdel-Rahman. MET oncogene as a therapeutic target for uveal melanoma, Selective Investment Grant, OSU College of Medicine, 2006–08.

FH Davidorf (PI), RB Chambers, R Deasy. An open-label, multi-center extension study to evaluate the safety and tolerability of ranibizumab in subjects with subfoveal choroidal neovascularization (CNV) secondary to age-related macular degeneration (AMD) who have completed the treatment phase of a genentech-sponsored ranibizumab study (HORIZON), Genentech Pharmaceuticals, 2006-08.


FH Davidorf (PI), AD Letson, JB Christoforidis. Comparison of Anti-angiogenesis Treatments Trial: a multi center Comparison of AMD


AD Letson (PI), FH Davidorf, JB Christoforidis, S Chang. A Phase IV, open label, multi-center, trial of maintenance intravitreous injections of Macugen® (pegaptanib sodium) given every 6 weeks for 48 weeks in subjects with subfoveal neovascular Age-Related Macular Degeneration initially treated with a modality resulting in maculopathy improvement (LEVEL). OSI/EyeTech, 2006-08.


R Xu (PI), CJ Roberts, L Leguire. Functional image of visual cortex & retina tissue for vision pathophysiology.” Children’s Hospital/OSU Collaborative Research Award, 2006-08.
Publications & Presentations

Publications


Presentations


Roberts CJ. “Clinical Applications of Corneal Biomechanical Measurements with the ORA for Refractive Surgery and Glaucoma: In Clinical Applications of Corneal Biomechanical Measurements with the ORA for Refractive Surgery and Glaucoma”. ASCRS Course. Chicago, IL. April 7, 2008.


Outreach

Havener Annual Alumni Reception at AAO

Every fall we celebrate the rich history of the Havener Eye Institute by bringing together the many alumni that the Department has trained over the years at a reception at the AAO annual meeting. Whether they are last year’s graduating residents or former residents under Dr. Havener, we welcome them to an evening reception and honor the tradition that has spread far beyond our campus borders.

The 2007 Alumni Reception was held in New Orleans at the Royal Sonesta on Bourbon Street. This event once again provided a wonderful way to reconnect with former colleagues and friends.
A beautiful, cloudless day greeted the 88 golfers that participated in this year’s 2008 BuckEYE Golf Classic. The past two golf outings had good weather, but this year was outstanding. With The Ohio State University Buckeyes’ Football Coach Jim Tressel on hand to support the charity outing, the day was a tremendous success. The golfers showed up early to stand in line to buy an autographed football and take a photo with Coach Tressel. “With over a hundred

In recognition of the generosity shown by so many, the Department hosts an annual BuckEYE Benefactor Bash for alumni, donors, and friends of the Havener Eye Institute. In October of 2007, it was held at the Ohio Stadium in the Presidential Suite. Members of The Ohio State University Alumni Band entertained the group with traditional Buckeye music. The Ohio State Buckeyes were in Happy Valley playing the Penn State Nittany Lions on their home turf. It was a great evening of fun watching Ohio State coach, Jim Tressel, lead the Buckeyes to an easy 28-6 victory over the Lions. In the end Penn State Coach, Joe Paterno, had to admit, “Their defense played well. They can run, they are well coached, and run a good scheme.”
footballs we thought for sure we’d have extra, but we sold out without a single to spare,” said Laura Sladoje, Outreach Director for the Havener Eye Institute. “We were thrilled to have Jim Tressel as our special guest this year, and knew it would be a great opportunity to raise money for the residents.”

The BuckEYE Golf Classic was started as a way to raise funds for the OSU Department of Ophthalmology. Proceeds from the first BuckEYE Golf Classic with Archie Griffin enabled the department to buy the expensive textbooks that are required for resident lectures and education.

Last year, the 2007 BuckEYE Golf Classic had OSU Basketball Coach Thad Matta as the special guest. With Coach Matta on board, the department was able to raise enough money to completely update one of the examination rooms in the resident clinic. “The resident clinic’s exam rooms are in critical need of new equipment,” said Dr. Alan Letson, Havener Eye Institute Residency Director. “Without the proceeds from the BuckEYE Golf Classic, it wouldn’t have been possible.”

Ellen Tressel was also on hand to lend her generous support by exhibiting her talent as an excellent golfer. She led a foursome that shot 12 under par and tied for 3rd Place.

The 2008 BuckEYE Golf Classic raised over $65,000. “Along with the golfers, we had so many wonderful sponsors this year led by major sponsor Fifth Third Bank,” said Sladoje, “the support from the community was just amazing.”

“This year’s outing will bring us closer to our goal of purchasing updated equipment for the whole resident clinic,” said Letson. “Outfitting the patient rooms with state-of-art examination and diagnostic equipment is giving these young physicians the tools to succeed.

At the Havener Eye Institute, we believe that together we can improve the future of eye care by educating tomorrow’s physicians. The BuckEYE Golf Classic is helping us reach that goal.”
On February 29 - March 1, 2008, the Havener Eye Institute sponsored the 51st Annual Ophthalmology Postgraduate Symposium at the Hilton Easton in Columbus, Ohio.

This year’s conference focused on systemic diseases related to the eye. The focus was an update for ophthalmologists on a wide variety of topics given by physicians who are experts in their specialties. These lectures provided practical review and new knowledge to both the general and specialty ophthalmologist.

The course director was David K. Hirsh, M.D., Clinical Assistant Professor at The Ohio State University. The meeting faculty included Gregory Christoforidis, M.D., David Hirsh, M.D., Steven Katz, M.D., Eric Kraut, M.D., Boris Karanfilov, M.D., Herbert Newton, M.D., Kwame Osei, M.D., Enver Ozer, M.D., Jonathan Trobe, M.D., Judith Westman, M.D., Ronald Whisler, M.D., and Matthew Zirwas, M.D.

The Annual Havener Society Dinner was held Friday evening February 29, 2008. Along with Dr. Don Lewis, a new inductee to the Havener Society, Dr. Holton Letson and Dr. Henry & Suzanne Croci were recognized for achieving new heights of giving and advancing to the Havener Society’s Fellow Circle.
Establishing a tradition in Ophthalmology

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