IOWAVISION

NEWS FOR ALUMNI AND FRIENDS OF THE UNIVERSITY OF IOWA DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES

FALL 2015 / WINTER 2016 VOLUME 8 ISSUE 2

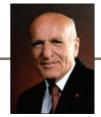
LEADERSHIP THROUGH THE YEARS



CECIL S. O'BRIEN, MD(1925-1949)



ALSON E. BRALEY, MD (1950-1967)



FREDERICK C. BLODI, MD (1967-1983)



CHARLES D. PHELPS, MD (1984-1985)



THOMAS A. WEINGEIST, PHD, MD (1986-2005)



KEITH D. CARTER, MD (2006-current)

Marking 90 years of Iowa ophthalmology

1925 was a watershed year – Calvin Coolidge's presidential inauguration became the first to be broadcast by radio; the "Great Race of Mercy" delivered diphtheria antitoxin via Alaska's Iditarod Trail; and John Scopes went on trial for teaching Darwin's Theory of Evolution.

It was also the year the University of Iowa Department of Ophthalmology was founded under the leadership of **Cecil S. O'Brien, MD**. Our academic mission and tradition of excellence began when the UI created one of the first, standalone departments of ophthalmology west of the Mississippi River. From the beginning, there was an emphasis on teaching and education. The tradition of daily Morning Rounds to discuss cases and exchange ideas – a staple of our residency and fellowship training programs – began under O'Brien and contributes to the culture of intellectual exchange that continues today.

Iowa's training program has evolved to meet the needs of the medical profession and expanded to allow the training of more subspecialist and general ophthalmologists, as well as orthoptists, medical students, and others. Clinical conferences and educational meetings were developed and play an ongoing, valuable role in sharing knowledge among practicing ophthalmologists. Online educational resources such as EyeRounds.org and Gonioscopy.org have been created in recent years through the efforts of innovative faculty,

residents, and staff. These activities and sources of information serve to increase ophthalmic knowledge and enhance Iowa's worldwide influence.

Growth in the department has occurred over the years through the recruitment of top faculty who represent all areas of primary and subspecialty eye care – many of whom have led and been actively involved in professional groups like the

"Our history is rich with contributions from many talented and generous individuals. We continue to build upon the strengths of those who came before us, and our future looks as bright and exciting as ever."

Keith Carter, MD

American Academy of Ophthalmology and the American Board of Ophthalmology. From a handful of faculty during O'Brien's era to more than 40 faculty under **Keith Carter**, **MD** today, each has helped strengthen Iowa's status in teaching, patient care, and vision research.

"90 years" continues on page 14

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Genetic discoveries See page 11 for more

TOWA VISION PATIENT CARE & CLINICAL UPDATES

Clinical services expand with new faculty



The Pediatric Ophthalmology and Adult Strabismus Service expanded their ranks with the addition of two new faculty members. Clinical Assistant Professor Alina V. Dumitrescu, MD, joins the department with specialty expertise in the treatment of inherited eye disorders, retinopathy of prematurity, and strabismus. Dumitrescu sees patients at the main hospital Eye Clinic and at the UI Health Care-Iowa River Landing facility in

Coralville. She also staffs the Inherited Eye Disease Clinic.



Also joining the pediatric ophthalmology service is Clinical Assistant Professor **Pavlina S. Kemp, MD**. Kemp specializes in pediatric cataract, and her research interests include strabismus outcome studies, resident education, and pediatric optical coherence tomography.

To schedule a pediatric patient appointment, contact 319-356-2859 or by email at oph-scheduling@uiowa.edu

The Glaucoma Service also gained a new team member. Clinical Assistant Professor **Daniel Bettis**, **MD**, joins the department with specialty expertise in glaucoma, cataract surgery, complex anterior segment surgery, and lens implant surgery. Special interests include new medical and surgical treatments for glaucoma including minimally invasive glaucoma surgery. He provides medical and surgical glaucoma care at UI Hospitals and Clinics main Eye Clinic and the UI Health Care-Iowa River Landing clinic in Coralville, as well as the Iowa City Veterans Affairs Medical Center.

One of the new and exciting options in the treatment of glaucoma is minimally invasive glaucoma surgery, or MIGS. The



procedure reduces intraocular pressure by improving outflow of eye fluid and has been viewed as safer than traditional trabeculectomy or tube shunt surgeries. Shorter recovery times are another of the benefits.

For Anna Nelson, a 20-year old from Omaha, Neb., the surgery dramatically lowered the intraocular pressure in her eye and provided an opportunity to reduce and eventually eliminate the need for glaucoma medications. Nelson was the first patient to undergo the new procedure offered by Bettis at UI Hospitals and Clinics.

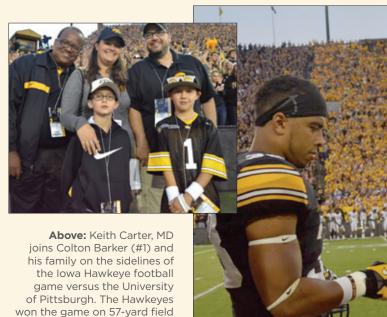
"I could see so much better the day after [the surgery]," shares Anna (pictured on left). "After the recovery period I was able to get back to playing softball and the other activities that I enjoy so much."

Eye clinic patient selected as Hawkeye Kid Captain

Eight-year old Colton Barker from Sioux City, Iowa, was selected as a Kid Captain for the University of Iowa football game Sept. 19 at Kinnick Stadium. Colton was treated by pediatric eye specialists at UI Hospitals and Clinics for retinoblastoma, a rare cancer of the retina that mostly affects young children.

Since the initial diagnosis in 2009, Colton has undergone 10 surgeries and has had seven prosthetic eyes so far. Earlier this year he celebrated five years of being cancer-free. **Watch his story at uichildrens.org/2015-colton**

Kid Captain is a partnership that began in 2009 between University of Iowa Children's Hospital and the Iowa Hawkeyes to honor pediatric patients and celebrate their inspirational stories.



Right: Kid Captain Colton Barker enjoys a pregame fistbump with Hawkeye running back Jordan Canzeri.

Colton with one of many

wonderful memories.

goal as time expired, providing

Photos courtesy of UI Health Care Marketing and Communications

Did you know?

Retinoblastoma is a rare disease. Only about 200 to 300 children are diagnosed with retinoblastoma each year in the United States.

Source: American Cancer Society



Eye doctors can play a role in curbing domestic violence

The World Health Organization defines intimate partner violence, or IPV, as physical, emotional, or psychological abuse inflicted by an intimate partner. In the last year data was available, it was estimated to affect 12 million individuals and cost \$8.3 billion in the U.S. annually.

Eye injuries are involved in 45% of the IPV cases, explains **Erin Shriver, MD, FACS**, assistant professor of ophthalmology and visual sciences. She points out that IPV is an underappreciated cause of ocular and orbital traumas. Injuries vary and can include orbital fractures and scleral lacerations; ophthalmologists across specialty areas have the potential to see IPV patients.

To get a better sense of the scope of the problem, Shriver worked with a group of medical students, residents, and fellows, including first-year resident **Thomas J. Clark, MD**, to determine the prevalence of IPV in cases involving orbital fractures and orbital trauma at UI Hospitals and Clinics. The group also collaborated with social workers to develop recommendations for identifying and referring future IPV victims. Among the recommendations, Shriver suggests

that ophthalmologists screen all female patients who have an ocular injury or orbital fracture of unclear etiology. She recommends screening patients in a private room whenever possible. Physicians should also offer support and refer the patient to appropriate social services staff who can direct patients to counseling, psychiatry, local shelters, or law enforcement.

Intervention by physicians has been shown to be effective in resolving violence. Shriver points to studies that show when patients are screened and referred to a patient advocate, they do follow-up, and resolution of violence is possible. In one study, 49% of patients who followed up with a case manager reported a resolution within a year.

"Ophthalmologists have a unique opportunity to help the victims of IPV and should not shy away from this responsibility," says Shriver. "We are seeing these patients in our clinic whether or not we Shriver (left) and second-year medical student Ali Cohen presented the group's findings at the Women in Ophthalmology meeting. Findings and recommendations are being developed into course work through the American Academy of

student Ali Conen presented the group's findings at the Women in Ophthalmology meeting. Findings and recommendations are being developed into course work through the American Academy of Ophthalmology and will be presented at the World Ophthalmology Congress 2016 meeting. Training on diagnosis and treatment of patients with IPV is also available at eyerounds.org/tutorials/IPV.htm

realize it. By intervening we might redirect a potentially devastating course."

Reporting IPV to the proper authorities is mandatory in certain states, so physicians should be aware of what their state requires. If a treating physician is unsure of the proper course of action, the National Domestic Violence Hotline (800-799-7233) is a resource for help. Physicians can remember the steps to proper screening and treating of an IPV patient using the acronym RADAR—routinely screen, ask direct questions, document your findings, assess patient safety, and review options and refer.



ONLINE **EXTRA**

Shriver was interviewed for the video update at the 2015 Women in Ophthalmology Summer Symposium. View her interview regarding the role of ophthalmologists in identifying domestic violence and diagnosis and care in these cases ewreplay.org/node/907?v=4419757507001

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TOWA VISION RESIDENT & EDUCATION NEWS

Graduation 2015



Graduating residents pictured left to right

Bradley Sacher, MD - Wheaton Eye Clinic, Wheaton, III.

C. Blake Perry, MD - Oculoplastics Fellowship, Casey Eye

Institute, Portland, Ore. **Jesse Vislisel, MD** - Cornea and External Disease Fellowship, University of Iowa

Jeffrey Welder, MD - Siskiyou Eye Center, Ashland, Ore.

Jonathan Hager, MD - private practice in Texas

Graduating fellows with new location



David Almeida, MD, MBA, PhD - VitreoRetinal Surgery, PA, Minneapolis, Minn.



Meredith Baker, MD – Minnesota Ophthalmic Plastic Surgery Specialists, Minneapolis, Minn.



Megan Chambers, MD – Ophthalmic Surgeons and Consultants, Columbus, Ohio



Eric Chin, MD – Retina Consultants of Southern California, Redlands, Calif.



Rachel Huckfeldt, MD, PhD – Medical Retina & Inherited Degenerations, Massachusetts Eye and Ear Infirmary, Boston. Mass.

Amy Troll - Iowa City, IA

Orthoptic Program Graduates



Ashley Ko, MD -University of British Columbia, Vancouver, British Columbia



Matthew Raecker, MD – Des Moines Eye Surgeons, Des Moines, Iowa



Enrique Rivera, MD -Glaucoma Fellowship, UT Southwestern Medical Center, Dallas, Texas



Leah Bailey, CO - Nemours Children's Hospital, Orlando, Fla.

Kelsie Jensen, CO - Eye Surgeons Associates, Bettendorf, Iowa

Matthew Weed, MD -Pediatric Ophthalmology Fellowship, University of Iowa Hospitals and Clinics

Class of 2018 first-year residents



Pictured left to right:

Tyler Risma, MD

BS, Wheaton College, Wheaton, III. MD, University of Iowa Carver College of Medicine

Lindsay McConnell, MD

BSE, University of Iowa MD, University of Iowa Carver College of Medicine

Matthew Miller, MD

BA, University of Utah, Salt Lake City, Utah MD, University of Utah School of Medicine

Lorraine Mvers, MD

BS, Indiana University, Bloomington, Ind. MD, Indiana University School of Medicine

Thomas J. Clark, MD

BS, Iowa State University, Ames, Iowa MD, University of Iowa Carver College of Medicine

New fellows



Elaine M. Binkley, MD - Retina/Vitreous

MD, The Ohio State University College of Medicine, Columbus, Ohio; Residency, Havener Eye Institute, The Ohio State University



Andrew R. Carey, MD - Medical Retina

MD, University of South Florida College of Medicine, Tampa, Fla.; Residency, University of South Florida College of Medicine; Neuro-Ophthalmology Fellowship, Bascom Palmer Eye Institute, Miami, Fla.



Harinderpal S. Chahal, MD - Oculoplastic and Orbital Surgery

MD, University of Virginia School of Medicine, Charlottesville, Va.; Residency, University of California-Davis Medical Center, Sacramento, Calif.



Jiaxi Ding, MD - Glaucoma

MD, The Ohio State University College of Medicine, Columbus, Ohio; Residency, Ross Eye Institute, The State University of New York at Buffalo



Rachel C. Mercer, MD - Neuro-Ophthalmology

MD, Texas Tech University College of Medicine, Lubbock, Texas; Residency, Mayo Clinic School of Graduate Medical Education, Rochester, Minn.



Chaunhi T. Van, MD - Ocular Pathology

MD, University of Central Florida, Orlando, Fla.



Jessica Watson, MD - Retina / Vitreous

MD, University of North Carolina School of Medicine, Chapel Hill, NC; Residency, Scheie Eye Institute, University of Pennsylvania, Philadelphia, Penn.



Glaucoma curriculum now online

Wallace L.M. Alward, MD, professor of ophthalmology and director of the Glaucoma Service at UI Hospitals and Clinics, has produced a teaching site for residents and others interested in learning about glaucoma. It breaks glaucoma into 50 bite-sized lectures that average 14 minutes in length. In total, the curriculum is just under 12 hours long. It is highly visual with over 900 images and 90 movie clips covering all aspects of glaucoma.

Visit curriculum.iowaglaucoma.org

Video resource for oculoplastic surgery techniques

Content on our ophthalmic education website EyeRounds. org received a big boost thanks to oculoplastics and orbital surgery specialist, **Richard Allen, MD, PhD**. Over 200 videos involving oculoplastic surgery techniques have recently been posted online.

Topics range in level from beginner to advanced and include techniques such as repair of ptosis, dermatochalasis, entropion, ectropion, and more. The compilation of content is believed to be the most comprehensive collection of oculoplastic videos in the world.

The total running time is about 10 hours. Overall, the videos are concise – lasting on average three minutes, making it easy for someone to quickly view as they are either learning about or preparing for a new surgery.

Check out oculosurg.com

Serving the underserved

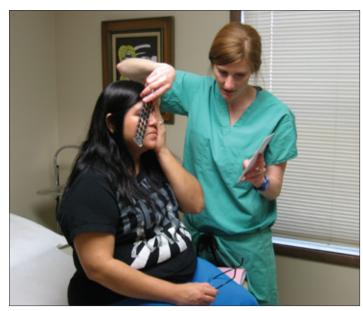
Resident doctors of the Department of Ophthalmology and Visual Sciences have a record of volunteer service with the Iowa City Free Medical Clinic (ICFMC) that dates back to the 1990s. Recently, they combined efforts with ophthalmology fellows and medical students of the UI Carver College of Medicine to offer free diabetic eye disease screenings.

The events provided needed vision screenings to dozens of individuals who have limited access to health care or insurance. Several of the patients examined were identified as needing interventional eye care.

"The patients who we treat at the Free Clinic are our neighbors, and they're not getting the care they should be getting," says **Philip Niles, MD, MBA** ('16R), a third-year ophthalmology resident who leads the resident volunteering effort. "I'm happy that we are able to do our part as representatives of the university to help our community in Iowa City."

Individuals with diabetes should get checked annually for diabetic retinopathy, a condition that can lead to retinal detachment and blindness if left untreated. Clinic providers at the ICFMC see individuals with a range of medical conditions, and they have many diabetic patients who are unable to afford these yearly exams. This is where the Free Eye Clinic comes in—to meet that demand.

The clinic functions by having a medical student greet each patient, obtain an ocular history, and measure the patient's vision and eye pressure. A resident or fellow physician then performs a dilated eye exam. This model allows the group to see many more patients than with traditional appointments—over 20 per hour at times—and not have to turn away anyone who may be in need.



TOWA VISION RESIDENT & EDUCATION NEWS

Teaching awards go to...

Each year medical students and residents select the best teachers. The 2015 awardees include:



Medical student teaching awards:
Jonathan Hager, MD
(Resident)
Meredith Baker, MD and
Ashley Ko, MD (Fellows)
Erin Shriver, MD (Faculty, pictured with Keith Carter, MD, after receiving the award)

Resident teaching awards: **David Almeida, MD, MBA, PhD** (Fellow) **Mark Greiner, MD** (Faculty)

AAO's YO Committee adds Iowa trainees

Steve Christiansen, MD ('17R), and Jiaxi Ding, MD ('16F), were selected as team members of the American Academy of Ophthalmology's YO Committee. Young ophthalmologists (YOs) are those in training or in their first five years in ophthalmology practice. Christiansen has been selected to serve as a member of the 2016 YO Committee as the member-in-training representative. Ding will serve on the editorial board of YO Info, the AAO's newsletter for young ophthalmologists.

The **Iowa Eye Association** serves an important function in sustaining the excellent training program at the University of Iowa. In addition to educational resources and alumni events held throughout the year, membership dues support programmatic activities for current residents and fellows. Association leadership includes:

President - **F. Hunter Fuerste, MD** ('82MD), Fuerste Eye Clinic, Dubuque, Iowa

President Elect - Open

Secretary - **Richard Olson, MD** ('96R, '97F), Department of Ophthalmology and Visual Sciences, University of Iowa Hospitals and Clinics

Treasurer - **Joe Schmidt, MBA**, Department of Ophthalmology and Visual Sciences, University of Iowa Hospitals and Clinics

Thank you to the Iowa alumni and area ophthalmologists who continue to support the Iowa Eye Association!

ALUMNICORNER

Former resident chosen for early career award



The UI Carver College of Medicine recognized Andrew Doan, MD, PhD ('05R), with the 2015 Early Career Achievement Award. Doan completed an internal

medicine internship and general clinical surgical ophthalmology residency at the University of Iowa. During that time, he co-founded and designed EyeRounds.org, an educational website now used by ophthalmologists all over the world. He was awarded the prestigious Heed Fellowship and elected into the Society of Heed Fellows.

Doan practices ophthalmology in southern California. He is very involved with American Academy of Ophthalmology initiatives and the Young Ophthalmology program. In addition to leading humanitarian missions on the U.S.N.S. Comfort, he heads up Addictions and Resilience Research for the U.S. Naval Medical Center in San Diego.

Remembrances

- Russell Widner, MD ('61MD), passed away on Jan. 31, 2015 in Spokane, Wash.
- Thomas Tubbesing, MD ('78MD), of Kirkland, Wash. passed away on Feb. 20, 2015
- Ralph Hadlund, MD ('54MD), of Bloomington, Minn., died on Aug. 25, 2015
- Michael A. Krasnow, DO, PhD ('90F), from Huntington, W.Va. passed away on Sept. 2, 2015.
- * Edward "Terry" S. Perkins, MD (former faculty



'79-'86), passed away on Sept. 9, 2015 in Watertown, Wis. Perkins published over 150 scientific papers and several books. He ran the comprehensive ophthalmology clinic at UI Hospitals and Clinics until his retirement in 1987.

lowa alumni recognized for contributions to ophthalmology

Several alumni from the University of Iowa's Ophthalmology training program were recognized by the American Academy of Ophthalmology in 2015.



The Academy's highest honor, the Laureate Recognition Award, recognized **Bruce E. Spivey, MD, MS, MEd** ('59MD, '64R), for his leadership in the profession and exceptional contributions to ophthalmic education in the United States and abroad. Spivey completed medical school and residency training at the University of Iowa,

where he also served on faculty for several years. He has led a very distinguished career in the field of ophthalmology and academic medicine.



Also honored was **Gary E. Fish, MD** ('77F), who is a 2015 Outstanding Humanitarian Awardee in recognition of his charitable activities and community service.

(Images courtesy of American Academy of Ophthalmology)

Secretariat Award recipients included Iowa alumni Vinay A. Shah, MD ('06F), and Mark J. Mannis, MD ('80F). Other University of Iowa alumni being recognized included:

LIFE ACHIEVEMENT HONOR AWARDEES -

- Gary W. Abrams, MD ('78F)
- Richard L. Anderson, MD, FACS ('71MD, '75R)
- Michael W. Belin, MD ('83F)
- Susan H. Day, MD ('80F)
- Donald J. Doughman, MD ('61MD, '67R)
- Edward J. Holland, MD ('85F)
- Henry J. Kaplan, MD ('78R)
- Richard A. Lewis, MD ('83F)
- Jeffrey A. Nerad, MD ('84F)
- Bruce E. Spivey, MD, FACS ('59MD, '64R)
- **H. Stanley Thompson, MD** ('66R, emeritus faculty)
- Thomas A. Weingeist, PhD, MD ('72MD, '75R, '76F, emeritus chairman)

SENIOR ACHIEVEMENT AWARDEES -

- Richard M. Feist, MD ('93F)
- Stephen R. Russell, MD ('88F)
- Michael P. Vrabec, MD ('88F)

ACHIEVEMENT AWARDEES -

- Adel H. Alsuahaibani, MD ('08F)
- John T. Harvey, MD ('81F)
- Michael J. Howcroft, MD ('82F)
- Daniel J. Karr, MD ('85F)
- Anna S. Kitzmann, MD ('08F)
- Jill S. Melicher Larsen, MD ('09F)
- Erin M. Shriver, MD ('06R)
- Randall E. Verdick, FOPS (retired staff)

Details and a complete list of AAO award recipients is at: aao.org/about/awards/program

Other Alumni Notes

❖ Stephen D. Miller, MD ('79R), was elected chairman of the board of the Seva Foundation.



The nonprofit foundation helps develop self-supporting, high-quality eye hospitals in numerous countries around the world, including Tibet where

he is shown (left) assisting staff with vision exams.

Shandiz Tehrani, MD, PhD ('13F), was selected as an Emerging Vision Scientist by the Alliance for Eye and Vision Research.

Congratulations to our alumni and colleagues for their accomplishments and dedication on behalf of the field of ophthalmology. If you receive a special award or distinction, let us know. Email us at iowaeyecare@uiowa.edu

New lecture series to support ethics



Residents and fellows training in the department of ophthalmology and visual sciences will now have an opportunity to complement their surgical training with teaching in the field of ethics.

The Wolken Ethics Lecture Series was initiated with a generous gift from Stephen and Sue Wolken (pictured above left) and their son and daughter-in-law, Mark Wolken and Jennifer Huber (pictured above right). Steve and Mark completed their residencies in ophthalmology at the University of Iowa and have enjoyed successful careers in private practice.

"We want other physicians to be able to train in such an outstanding, highly regarded, ethical program. Our hope is that this department stays on the forefront of ophthalmology research, training and delivery of ophthalmic medical care," comments **Stephen Wolken, MD** ('68MD, '75R).



The series will provide a forum to share and discuss topics related to medical ethics and their application to the profession of medicine. The series will be a part of the department's major meetings or clinic conferences. The fund may also provide support to enhance educational programs and training.

"My years in private practice have given me a much greater appreciation for the Department of Ophthalmology at the University of Iowa. To this day, the voices of my mentors continue to guide me in dealing with difficult surgical situations or unique clinical presentations. I am hopeful that the lecture series will help provide guidance for ophthalmologists, both in training and in practice, to help make difficult clinical and business decisions that will enhance the quality of patient care," states Mark Wolken, MD ('97MD, '01R).



Local company tees off for childhood vision screening

Employees and suppliers of Whirlpool-Amana Operations donated over \$38,500 to the Iowa KidSight program at the University of Iowa Children's Hospital during a check presentation. Proceeds were generated at the 2015 Whirlpool Amana Supplier Charity Golf Outing held at Brown Deer Golf Club in Coralville, Iowa.

lowa KidSight has been a beneficiary of the golf event the past four years. Support enables lowa KidSight to enhance the early detection and treatment of vision problems in young children throughout lowa (lowaKidSight.org).

A donor profile: Dr. Richard Corley

Story by Ben Frotscher

When **Richard Corley, MD**, was diagnosed with glaucoma in 2000, he decided to seek a second opinion. Call it a doctor's gut instinct. Because of his relationship with H. Culver Boldt, MD—whose father was a long-time neighbor—Corley contacted Dr. Boldt, a professor of ophthalmology and visual sciences at the University of Iowa.



"I ended up seeing **Dr. Lee Alward** and **Dr. Kenneth Goins**, and they agreed that I didn't have glaucoma," said Corley. "I was diagnosed with posterior polymorphous corneal dystrophy, and I needed to have a corneal transplant for my left eye." While the success rate is relatively high for these procedures—and it was for Corley as well—it was the care and outcome that thoroughly impressed the longtime physician.

"I was treated like a king, and I'm forever indebted to Drs. Alward and Goins," he said. "After the corneal transplant, I could actually see better than I could before." For Corley—a dentist, board-certified surgeon, and board-certified plastic surgeon—this life-changing procedure allowed him to continue his plastic surgery practice in Peoria, Ill. At 85 years old, he still sees patients on a weekly basis and has seen more than 60,000 individuals throughout his career.

"I started as the only burn specialist in Peoria in 1969, and I introduced the use of pig skin for patients here," said Corley, who has been able to recreate fingers and save limbs for those who have been badly burned. He's been able to continue his career and help patients lead more enjoyable lives because of his care at University of Iowa Hospitals and Clinics, and it's led him to give generously to multiple UI medical departments.

Dr. Corley has supported the Department of Ophthalmology and Visual Sciences, Department of Neurosurgery, Department of Orthopaedics and Rehabilitation, and Department of Anesthesia. While he has assisted many individuals through his own medical practice, his generosity to UI Hospitals and Clinics has also benefited countless patients from all over the Midwest.

"Supporting University of Iowa Hospitals and Clinics is a way I can show my appreciation for what has been done for me—not only saving my eyesight, but also saving my plastic surgery practice," he said. "Without their expertise and care, I wouldn't be practicing at the age of 85."

Young patient spurs fundraising effort for retinal research

For 15-year-old Trisha Kulkarni, life has had its share of challenges. She had vision problems in her left eye when she was younger and suffered a retinal detachment in her right eye when she was just 12. Her vision loss and eye inflammation led the Kulkarni family to seek treatment from various specialists around the country. Eventually, they came to UI Hospitals and Clinics and were seen by retinal specialist **Vinit Mahajan**, **MD**, **PhD**.

Since her first visit, Trisha and her family have been impressed with the level of care they have received. "There was a very visible difference in our care from all the clinic staff. It was a whole team effort," states Trisha.

She has had surgery and receives ongoing treatments for her retinal condition at UI. During the course of her visits and after hearing about the research taking place at the University of Iowa, the family decided to get involved in the effort.

This past summer, the Kulkarnis held a golf fundraiser event in their local community to benefit vision research



Trisha (left) and older sister, Esha at the Kulkarni Family Golf Outing for Retinal Research.

"Retinal Research" continues on page 10

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at the UI. The event was a big success, raising over \$40,000 from family supporters and local businesses. The idea came from Trisha and her sisters – all avid golfers – who wanted to combine their family's passion for golf and vision research.

Recalling the event's success, Trisha says, "It puts us one step closer to finding something that will help. If it's tomorrow or 10 years from now, I'm optimistic that at some point I will have vision again."

With perspective beyond her 15 years of age, she adds, "Some things in your life you can't control – for me it's my vision – but I'm not taking this as a bad thing. A lot of good is coming from my situation. I think a lot of kids will benefit from the awareness and the research we're trying to promote."

"Trisha is a remarkable young woman who perseveres no matter what the odds. The generous gift from her family and friends will be used towards developing improved diagnostics and advanced therapeutics for children suffering from eye inflammation and retinal detachment."

Vinit Mahajan, MD, PhD



The University of Iowa Foundation

To learn more about how philanthropic support helps advance the work of the UI Department of Ophthalmology and Visual Sciences and Stephen A. Wynn Institute for Vision Research, please contact:

Mitch Beckman Sean Matthys mitch-beckman@uiowa.edu sean-matthys@uiowa.edu

Sara Volz Katie Sturgell sara-volz@uiowa.edu katie-sturgell@uiowa.edu

The University of Iowa Foundation Levitt Center for University Advancement P.O. Box 4550 Iowa City, IA 52244-4550 319-335-3305 or 800-648-6973

The UI acknowledges the UI Foundation as the preferred channel for private contributions that benefit all areas of the university. For more information or to make a donation in support of the eye program, visit the UI Foundation's secure website at **givetoiowa.org/eye**

TOWA VISION RESEARCH ACTIVIT

Showcasing research



Vision researchers, physicians, residents, fellows, and students gathered for the Department's annual Resident and Fellow Research Day. The event showcases research projects taking place throughout the University of Iowa Stephen A. Wynn Institute for Vision Research. Keynote speaker for the 2015 event was David Gamm, MD, PhD, of the McPherson Eye Research Institute at the University of Wisconsin-Madison (above on right).



Residents and fellows presented their projects and findings with awards going to the top resident and top fellow project. This year's P.J. Leinfelder Award winners include:

Philip Niles, MD, MBA ('16R) – Resident paper "Cost Difference between Optometrists and Pediatric Ophthalmologist for Treating Pediatric Hyperopia: Over \$1 Billion"

Matthew Weed, MD ('14R, '15F, '16F) – Fellow paper "Genetic Testing for Congenital Cataract"

Phelps Research Award

Chris Johnson, MSc, PhD, DSc, was awarded the 2015 Charles D. Phelps Research Award for his efforts involving perimetry, imaging, and the study of structure-function relationships in glaucoma. Johnson is a member of the Iowa Glaucoma Center and directs the Visual Field Reading Center.

Gene for North Carolina Macular Dystrophy discovered

Researchers at the University of Iowa Stephen A. Wynn Institute for Vision Research announced the discovery of a gene that controls the development of the human macula. The macula is the central portion of the retina needed for normal reading and driving vision. The discovery was published in the journal *Ophthalmology*.

According to Kent Small, MD, a retina specialist affiliated with Cedars-Sinai Board of Governors Regenerative Medicine Institute in Los Angeles, this discovery is the culmination of more than 20 years of work. Small, the study's lead author, first mapped the gene causing North Carolina macular dystrophy to chromosome 6 in 1992. It ultimately required an international team of 20 investigators using data from the Human Genome Project and an elaborate computer analysis to identify the actual mutations in intergenic DNA near the *PDRM13* gene. Understanding how this gene works may help treat macular diseases more effectively in the future.

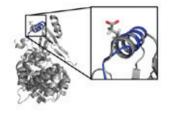
"Scientists already know how to create new retinal cells from a patient's skin," said **Edwin Stone MD**, **PhD**, the director of the Wynn Institute for Vision Research and a coauthor of the study. "This new finding will help us learn how nature builds a macula so that scientists in the future can reconstruct an injured macula using the patient's own cells."

The study was funded in part by a \$25 million gift from Stephen A. Wynn, chairman and chief executive officer of Wynn Resorts, Limited.

Learn more at wivr.uiowa.edu



Researchers find new genetic cause of retinitis pigmentosa



A simulation of the mutated TRNT1 protein structure in blue relative to the normal structure in grey. This subtle change in a gene required in every cell can cause retinitis pigmentosa. Investigators with the UI Stephen A. Wynn Institute for Vision Research recently reported the discovery of a new genetic cause of retinitis pigmentosa. The gene TRNT1 is responsible for adding the CCA nucleotides to the 3' of tRNAs, and is therefore essential for translation of messenger RNAs into proteins. Severe genotypes in TRNT1 have been previously shown to cause a serious syndromic disorder that includes sideroblastic anemia. However, the genotypes of the patients reported in the current paper cause a much milder phenotype characterized by adult-onset autosomal recessive retinitis pigmentosa and asymptomatic erythrocytic microcytosis.

Findings were reported online and in the journal *Human Molecular Genetics*.

TOWA VISION FACULTY & DEPARTMENT NEWS

Lab dedication honors colleague and collaborator

The William J. Kimberling Usher Research Laboratory was dedicated earlier this year. The space honors Kimberling's four decades of outstanding research into the development of effective treatments for all forms of Usher syndrome, the most common cause of combined deafness and blindness.

Kimberling spent most of his career at the Boys Town National Research Hospital in Omaha, Neb., but in later years also held a faculty position at the University of Iowa.

The honor was made possible by a generous donation from Howard F. Ruby, the founder, chairman, and CEO of Oakwood Worldwide in California.





Above: William Kimberling, PhD (above on left), visiting with Markus Kuehn, PhD, at a dedication ceremony attended by colleagues, friends, and family.

Left: Edwin Stone, MD, PhD (left), shares remarks about the important contributions of Kimberling, a research collaborator and contributor of the UI Stephen A. Wynn Institute for Vision Research.

UI Hospitals and Clinics remains among the nation's best

U.S. News & World Report released its annual "Best Hospitals" rankings for 2015-16 and, once again, UI Hospitals and Clinics is chosen as one of the leading eye programs in the United States. The Department of Ophthalmology and Visual Sciences ranked #7 and has been among the best programs since surveying began.



UI Hospitals and Clinics has seven specialties ranked in the Top 50 and five more listed as high-performing. U.S. News also ranked UI Hospitals and Clinics as the No.1 hospital in Iowa.

The 2015-16 hospital rankings are available at usnews.com/besthospitals

Faculty updates



Arlene V. Drack, MD, was promoted to associate professor of ophthalmology. Drack staffs the Pediatric Ophthalmology and Adult Strabismus Service and directs the Pediatric Electroretinogram Service. She also holds the Ronald V. Keech, MD, Associate Professorship in Ophthalmic Genetics.



Another promotion to associate professor of ophthalmology includes **Budd A. Tucker**, **PhD**. Tucker directs the Steven W. Dezii Translational Vision Research Facility and holds the Stephen A. Wynn Professorship in Regenerative Ophthalmology.



Oculoplastics surgeon, Richard Allen, MD, PhD (right), recently left the University of Iowa for a position in the Lone Star state. Allen joined the University of Texas MD Anderson Cancer Center in Houston. We will miss his contributions to the department and wish him all the best in his new position.

Faculty accolades



Erin Shriver, MD, FACS, assistant professor of ophthalmology and visual sciences, was selected for the 2015 Emerging Leader Award by Women in Ophthalmology (WIO) at its Summer Symposium in Scottsdale, Arizona. Dr. Shriver has served as the WIO Summer

Symposium Chair and has been a board member as well.

The WIO Emerging Leader Award recognizes individuals who are newer to practice and have already made significant contributions to WIO and/or to the profession and have demonstrated the potential for leadership and continuing service.



Glaucoma specialist **John Fingert, MD, PhD**, was recognized for his service and contributions to ophthalmic research by being named a Fellow of the Association for Research in Vision and Ophthalmology.



James Folk, MD, professor of ophthalmology and visual sciences, received an Honor Award for his contributions to the American Society of Retinal Specialists at their 33rd annual meeting in Vienna.



Mark Greiner, MD (center), assistant professor of ophthalmology, was presented with the Richard C. Troutman, MD, DSc, Prize during the Fall Education Symposium of the Cornea Society. The Troutman Cornea Prize for Young Clinician Investigators recognizes innovation in corneal science and the best paper in the journal Cornea during the previous year.

Photo courtesy of Stacey Gardner, Eye Bank Association of America



Peering through time

A unique collection of antique eyeglasses and instruments on display in the Eye Clinic informs patients about the tools ophthalmologists once used to examine and measure vision. Included is a variety of eyeglass styles from earlier periods.

The collection was generously donated by **John H. Mensher**, **MD** ('69F, '72R, '79F), and his wife Gail Mensher. John Mensher served on the faculty at the University of Iowa from 1974 to 1979.

TOWA VISION PEOPLE & EVENTS

"90 years" continues from page 1



The Eye and Ear Clinic was originally located in Seashore Hall on the University of Iowa campus before becoming a stand-alone eye clinic in the 1920s. Image courtesy of University of Iowa Libraries Special Collections and University Archives.

Another longstanding tradition is providing outstanding eye care for patients. Our compassionate physicians and staff remain committed to preserving sight and preventing vision loss while providing hope for more effective treatments and cures on the horizon. Patients come from all across Iowa, the Midwest, and beyond for their eye care and treatment for vision loss. Indeed, with nearly 70,000 patient visits per year, our clinics remain among the busiest at UI Hospitals and Clinics.

Locations have changed and expanded during our history. Originally on the east side of the Iowa River, the department has transitioned to different spaces within the main hospital west of the river and eventually to our current location in the Pomerantz Family Pavilion. These changes have brought improvements and expansion to facilities. In addition to modernized clinical space, the department has seen the addition of the Iowa Lions Eye Bank, F.C. Blodi Eye Pathology Laboratory, C.S. O'Brien Library, Braley Auditorium, clinical research space, and more. A satellite facility in Dubuque and clinic in Coralville have also been added to expand patient access. The result and ongoing objective are improved care for patients and a more robust teaching environment for future ophthalmologists.

Yet another area of important growth has been in Iowa's vision research program, where researchers have made major contributions to the field of ophthalmology and remain focused on seeking the causes and cures for blinding eye diseases. A world-renowned genetics program, as well as cutting-edge imaging, perimetry, and other areas of basic, translational and clinical research have flourished in recent years. A long-standing collaboration with the Iowa City Veterans Affairs Medical Center has benefitted Iowa's residency training program and fostered research through the creation of the Center for the Prevention and Treatment of Visual Loss, a partnership focused on the early detection

of potential blinding disorders of the veteran and general population. Research efforts were also significantly boosted with the recent creation of the University of Iowa Stephen A. Wynn Institute for Vision Research and the Steven W. Dezii Translational Vision Research Facility, a first-of-its-kind stem cell production facility dedicated to vision research.

Over the years, countless physicians, trainees, technicians, researchers, and support staff have been committed to our academic mission and have positioned the University of Iowa as a world leader in ophthalmology. The team and family atmosphere have played an important role in Iowa's rich history. The collaborative culture drives our progress today and will continue to in the years ahead.



ONLINE **EXTRA**

View more about Iowa's rich history in ophthalmology online at medicine.uiowa.edu/eye/history

The department celebrated the milestone in style during the lowa Eye Annual Meeting last June and at the lowa Eye Reception during the 2015 AAO Annual Meeting.

More event images at iowaeyealumni.shutterfly.com













Dedication ceremony recognizes anniversaries

The Iowa Lions Eye Bank held their annual dedication ceremony of the Iowa Lions Donor Memorial & Healing Garden this past September. The occasion marked the 10th anniversary of the garden as a place of healing and hope for patients, visitors, and staff of University of Iowa Hospitals and Clinics. The year 2015 also marks the 60th anniversary of the creation of the nationally recognized Iowa Lions Eye Bank.



A commemorative paver honoring the sixty years of sight-saving efforts of the Iowa Lions Eye Bank was revealed at the ceremony.



Cindy Reed, RN, PhD, director of the lowa Lions Eye Bank, shares remarks about the importance of cornea tissue donation with donor family members, cornea transplant recipients, and other guests at the annual dedication ceremony.

Tech of the Year



Patti Schuller, ophthalmic technician in our Perimetry Clinic, was selected by her peers as "Technician of the Year" in the Eye Clinic. The recognition is part of Ophthalmic Medical Technicians' Week (Nov. 2-6).

The observance is a combined effort of the Joint Commission of Allied Health Personnel in Oph-

thalmology, the Association of Technical Personnel in Ophthalmology, Inc., and the Contact Lens Society of America. It recognizes the important contributions that technicians make in eye care and raises awareness of ophthalmic careers.

IOWAVISION

IOWA VISION is published for alumni, colleagues, and friends of the Department of Ophthalmology and Visual Sciences at the University of Iowa.

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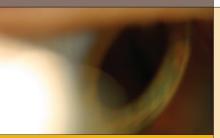
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Department news, events, and information: medicine.uiowa.edu/eye



200 Hawkins Drive, 11136 PFP lowa City, IA 52242



Save the date

Make plans to join us at the next Iowa Eye Association Annual Meeting and Alumni Reunion on June 10-11, 2016.

A fantastic lineup of speakers and educational content is planned, as well as great social activities for alumni and guests to enjoy. Notable speakers include Lisa Arbisser, MD; Alan Crandall, MD; and Bruce Spivey, MD, MS, MEd.

More information will be posted on our website or contact joe-schmidt@uiowa.edu

IOWA VISION UPCOMING EVENTS

Ophthalmology Clinical Conferences

March 4, 2016 Cataract/Comprehensive - James Banta, MD, Bascom

Palmer Eye Institute

(Note: this conference has changed dates from Saturday,

March 5, 2016)

April 1, 2016 Neuro-Ophthalmology - Nicholas J. Volpe, MD,

Northwestern Memorial Hospital

Sept. 16, 2016 Uveitis – Debra A. Goldstein, MD, FRCSC, Northwestern

University Feinberg School of Medicine

Nov. 4, 2016 Oculoplastic Surgery – Jonathan J. Dutton, MD, PhD,

FACS, University of North Carolina Kittner Eye Center

Other Events

May 1-5, 2016 ARVO 2016 Annual Meeting and Iowa Eye Reception,

Seattle

May 13, 2016 Department of Ophthalmology and Visual Sciences

Resident and Fellow Research Day, lowa City

May 20, 2016 18th Annual Iowa Optometric Conference, Iowa City

June 10-11, 2016 Iowa Eye Association Annual Meeting, Iowa City

June 9-11, 2016 UI Carver College of Medicine Alumni Reunion Weekend

(Classes of '46, '51, '56, '61, '66, '71, '76, '81, '86, '91, '96, '01,

and '06), Iowa City

June 24, 2016 Resident and Fellow Graduation, Kinnick Stadium,

Iowa City

Aug. 5, 2016 Midwest Eye Research Symposium 2015, lowa City