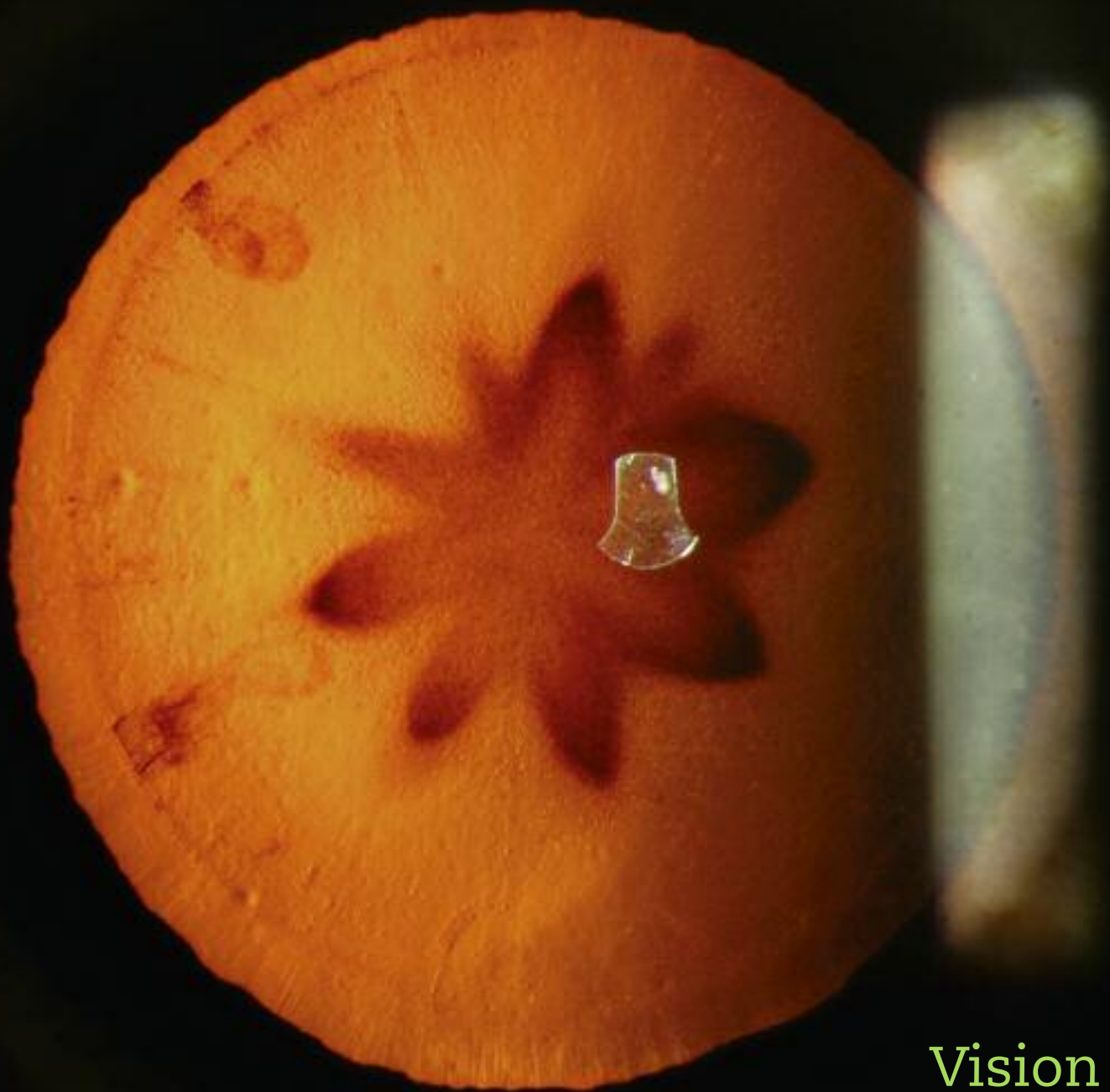


# Images



Vision for  
the future

A tooth for an eye  
Saving sight in Haiti

Bascom Palmer Eye Institute’s mission is to enhance the quality of life by improving sight, preventing blindness, and advancing ophthalmic knowledge through compassionate patient care and innovative vision research.



Planning for the future 2

The road to mastery 12

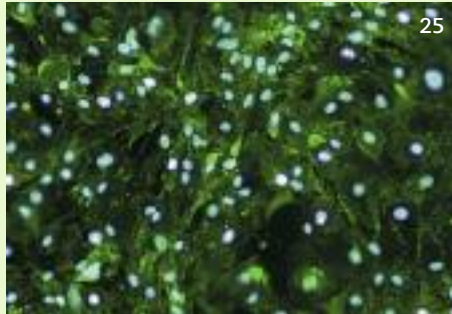
Faculty profiles 18

“Klinik Je” brings sight 22

Announcements 26

Awards and honors 28

Profiles in philanthropy 31



**On the cover:** The orange, flower-like image in the center of this patient’s eye is a cataract. A clouding of the natural lens of the eye, a cataract may appear as different shapes. The clear shape in the middle is a reflection from the slit lamp camera. Photograph by Sarah Miller of Bascom Palmer’s Estelle and George G. Rosenfield Imaging and Macula Center.

Dear Friends and Colleagues:

**"TOOTH IN EYE RESTORES WOMAN'S SIGHT"** was just one of hundreds of head-turning and impactful headlines seen around the world about a remarkable recent surgery at Bascom Palmer.

This past September, Dr. Victor Perez and his surgical team performed a modified osteo-odonto-keratoprosthesis (known familiarly as "eyetooth" surgery) for the first time in the United States.



This procedure resulted in a blind woman regaining her sight. The news of this extraordinary surgery in which the patient's eyetooth was removed from her mouth, fitted with an optical lens and implanted into her eye was truly astounding. Immediately following the surgery, the story appeared more than 730 times in print or on television, radio or online media sources in 25 languages and 61 countries.

The ability to perform such a revolutionary procedure reflects Bascom Palmer's unique stature within the realm of global ophthalmology. For almost 50 years, the most important innovations that have transformed the field of eye care have come from one place – the Bascom Palmer Eye Institute. Therefore, in this issue of *Images*, we highlight additional outstanding faculty and staff, and some of their impressive accomplishments that help keep us number one:

- Dr. David Tse, who throughout his career as an oculoplastic surgeon has tackled the toughest surgical challenges.
- Under the direction of Dr. Richard Lee, who is leading our Haiti relief efforts, a team from Bascom Palmer arrived in Port-au-Prince within 48 hours of the devastating earthquake. Since then, four additional Bascom Palmer teams have gone to Haiti to render care. We will continue to do so for as long as we are needed.

As proud as we are of what we have achieved throughout the history of our great organization, we must continually ensure that we are preparing for the future. While I address that general topic in the following interview, I am pleased to share the governmental support that will help us continue to grow:

- Through the American Recovery and Reinvestment Act, signed into law by President Obama last February as part of the government's stimulus package, seven investigators were awarded a total of \$1.7 million for research on glaucoma, retinal stem cells and neuroprotection-related projects that will be conducted over the next two years.
- Principal investigator, Dr. Bryon Lam, received a \$1.7 million grant from the Department of Defense. This funding will support the Bascom Palmer Eye Institute Center for Ophthalmic Innovation.
- A \$3 million grant was received from FEMA that will enable us to install hurricane-proof windows throughout the Anne Bates Leach Eye Hospital. The hospital will begin renovation of the cornea and laser vision center this summer. Additionally, plans are underway to add more surgical suites and remodel examination rooms and waiting areas in the outpatient surgery center.

With 2010 well underway, each of these key initiatives will help pave the way for us to be even more successful in meeting our mission and doing what we do best – providing patients with exceptional care. *Thank you* everyone, including all of our generous donors, for making that important achievement possible.

Eduardo C. Alfonso, M.D.  
 Kathleen and Stanley J. Glaser Chair in Ophthalmology  
 Chairman, Bascom Palmer Eye Institute

I was recently inducted into the University of Miami's Iron Arrow Honor Society. Founded in 1926, Iron Arrow is the highest honor attained at the University. Based on Seminole Indian tradition, Iron Arrow recognizes those individuals who exemplify love of alma mater, character, leadership, scholarship, and humility.

# The Chairman's Vision

An interview with Eduardo C. Alfonso, M.D.



Newly appointed chairman, Eduardo C. Alfonso, M.D., has a clear vision for the future of Bascom Palmer Eye Institute. Following are Dr. Alfonso's thoughts from a recent interview for *Images*.

***Please describe the Institute's mission.***

Our mission of providing compassionate patient care, ophthalmic education and innovative vision research is what drives every aspect of our operations. Since its founding, Bascom Palmer has rendered the best possible care to patients using the latest technologies and evidence-based treatments in a cost-efficient fashion. At the same time, we provide the next generation of physicians with the education it needs to continue this mission. We also focus on research – how we can prevent and cure diseases that affect vision. Our mission is centered on bringing together an exceptional team of physicians, educators, researchers and staff. With every decision, we ask: How will this enhance the quality of worldwide patient care and education?

***Will having a new chairman bring a fundamental change to the Institute?***

Not at all. Bascom Palmer was founded in 1962 by Dr. Edward Norton with the idea that it would become a permanent institute. In the past 48 years, we have had five chairmen, and every one has acted consistently with our founder's vision. Bascom Palmer is greater than any individual; it's an institution with a life of its own.

***Are there recent achievements you would like to mention?***

Once again, Bascom Palmer was ranked the number one eye hospital in the country by *U.S. News & World Report*, an honor it has held for six consecutive years. Our institute was also ranked as the nation's top eye hospital by *Consumer's Checkbook*, as published in *AARP The Magazine*. I would also like to mention that the Institute received recognition as the Best Overall Program, Best Clinical (Patient) Care and Best Residency in the nation by *Ophthalmology Times*. This was the second year in a row we were awarded the best overall program in the magazine's annual poll of chairmen and residency directors from



ophthalmology programs across the United States. That's a strong vote of confidence from our peers. The achievements of the Institute transcend its walls when you consider the impact of all those who have benefitted from training and working at Bascom Palmer and are now practicing ophthalmology around the world.

### ***How would you describe your leadership style?***

For me, it's the people who make Bascom Palmer a unique center of excellence and an exciting place to work. I believe in bringing in great people – clinicians, educators, researchers and staff who share our mission – and giving them the freedom to do their work and to further their careers.

### ***When did you become interested in medicine as a career?***

As an undergraduate college student at Yale, I considered both law and medicine as possible careers. In my senior year, I became interested in the brain and how it works and ultimately decided to stay at Yale for medical school. We had only 80 students per class, so I received very individualized attention; the senior professors were my peers and role models. At first, I considered psychiatry. Then, one of my professors, Dr. Caleb Gonzalez, now retired, introduced me to how the visual system provides a path to better understanding of the brain

and how it functions. I decided to become an ophthalmologist, and today, I couldn't think of doing anything else. I feel very fortunate.

## **PLANNING FOR THE FUTURE**

### ***Please describe your long-term vision for the Institute.***

As Bascom Palmer prepares for the future, it is essential for us to maintain our global perspective. Ophthalmology is advancing around the world. We continue to develop working relationships with leading U.S. and international institutions. One recent example is Dr. Victor Perez' collaboration with Italian ophthalmologist Dr. Giancarlo Falcinelli to bring to the U.S.A. a new procedure using a patient's tooth as the base for a prosthetic device in the eye. (See related story, page 8.)

At Bascom Palmer, being able to make high-quality health care available to everyone worldwide is a truly worthy goal. In that context, we have to make sure that we continue to educate physicians from around the world, build and strengthen research partnerships, and provide our expertise and leadership to advance clinical ophthalmology on a global scale.

### ***What are your plans for the Miami campus?***

Our short and long-term goal is to grow our clinical care, ophthalmic education and vision

research programs. Our temporary solution to the increasing demand for clinical and research space is to move offices and administrative services to other buildings. For instance, we are gradually converting administration offices into much-needed research space in the Evelyn F. and William L. McKnight Vision Research Center.

From a longer-term perspective, we are developing plans for a new, 500,000 square-foot hospital that would double the size of our current facility. This new hospital building, along with a large garage, would be located diagonally across from our existing hospital in the area now used for patient parking. This expansion project could be done in several phases and might incorporate an aerial bridge over the street to connect with our current building. We hope to embark on this major project in the next five years and complete it in seven to eight years.

#### ***What about the Institute's other facilities?***

We were forced to postpone an expansion of the Naples facility because of the economic downturn. As soon as conditions improve, we plan to more than double our current space from 4,000 square-feet to 9,000 square-feet. We also have plans to expand our clinical care facility in Plantation as well. In Palm Beach Gardens, we have completed the shell for a 25,000 square-foot clinical research building. On all of our campuses, we strive to provide the best physical environment for our patients to receive their care and for our staff to work. We are seeking philanthropic dollars that will allow us to develop all of these spaces.

### **FACING TODAY'S CHALLENGES**

#### ***What are the biggest challenges facing Bascom Palmer in 2010?***

Without question, our biggest challenge is the economic downturn. Like many other not-for-profit health care organizations, our ability to carry out our mission depends largely on private philanthropy. Without a doubt, philanthropy and our endowment have been dramatically affected by the economic environment. This presents a serious financial challenge that we are addressing.

At the same time, we are aware of the need to continually invest in our technology and infrastructure to best serve our patients and attract the brightest physicians, researchers and students seeking to develop their areas of expertise.

#### ***Please explain the Institute's role as a safety net for the community.***

As the department of ophthalmology for the University of Miami Miller School of Medicine, part of UHealth – University of Miami Health System – Bascom Palmer has a strong partnership with the Public Health Trust and the Jackson Health System to provide medical care for our community. We take every step necessary to treat each patient appropriately, whether it's an emergency case or a chronic condition.

#### ***How is Bascom Palmer addressing the national concern about the rising cost of health care?***

Every day we are looking at ways we can provide quality care in the least costly manner. Every Thursday, at our weekly faculty medical conference, our doctors analyze patients' cases to see what we did right and what we could have done better. As part of the discussion, we look at the cost factors to determine the financial consequences of rendering this care.

Through this educational exercise, we also ask these questions: Is this a treatment that has proven to be effective? Are we using treatments we think may work, but have never been studied? Are there potential discoveries that could help this patient in the future? This is the basis for providing medical care using an evidence-based approach.

For instance, retinal specialist, Dr. Philip Rosenfeld, was instrumental in the development of a new treatment for the wet form of age-related macular degeneration. By asking the right questions, he realized a drug used for fighting colon cancer was effective in treating this blinding condition, but was much less expensive than other medications. We are always asking how we can be more effective in serving our patients, and how we can provide health care more economically and efficiently.

### **DELIVERING HIGH-QUALITY CARE**

#### ***Why is Bascom Palmer a recognized world leader in ophthalmic clinical care?***

There are many reasons for our success, including a long tradition of providing personalized care, as well as addressing the most complex types of cases. We also understand the importance of working as a team that focuses on needs of the individual patient. We have

“There are many reasons for our success, including a long tradition of providing personalized care and addressing the most complex types of cases. Another reason is that we understand the importance of working as a team.”

— Eduardo Alfonso, M.D.

exceptional clinicians and health care professionals who share their knowledge and expertise to diagnose complex vision conditions and develop the most effective treatment plan.

The role model provided by Dr. Norton has been embraced by all who work at Bascom Palmer. Everyone who works here tries to take the best possible care of our patients every day with the well-rounded support that Bascom Palmer provides. As the dean of the University's medical school, Dr. Pascal Goldschmidt says, "If it is good for the patient, it is good for the Institution." We all strive to reach that goal.

***One of the nation's health care goals is to develop an electronic medical record (EMR). How close is that objective?***

At Bascom Palmer, we continue to improve our medical record systems. For instance, our physicians now dictate their patient examination notes directly into the medical school's "Cane Care" electronic application. Our doctors can bring up a patient's transcribed medical record electronically and review images, procedures and notes. However, these capabilities are not yet integrated into a single system. Fortunately, a number of information technology vendors are now developing robust systems. The University of Miami has engaged Epic to develop an electronic medical record system for the entire school of medicine, including an ophthalmology module. Dr. Richard Parrish, a former chairman of Bascom Palmer, is spearheading our efforts to develop that ophthalmology module as a "user friendly" advancement for our program. To summarize, we are moving ahead rapidly and plan to implement this robust EMR as soon as the product is ready and meets our specifications.

***What will an EMR mean to the patient?***

In addition to providing a convenient and comprehensive source of information for the physician, an electronic medical record will be very empowering for the patient. Our hope is that it will increase patients' engagement with their medical care. For instance, patients could use smart phones to make appointments, see their test results and review instructions from the physician after they leave the hospital – an important advancement since some patients forget those instructions. The electronic medical record will continue to move health care in the right direction, where patients

become active partners with physicians in their health care. We, as patients, must take ownership of our health care, and we as caregivers, must engage patients in that way.

## EDUCATING FUTURE PHYSICIANS

***What are your plans for medical education?***

Bascom Palmer has a long-standing commitment to medical education. Each year, we train seven doctors, who stay here for three years for our ophthalmic residency program. We also accept approximately 30 fellows who are here for either one or two years for training in a subspecialty, such as retina, cornea, glaucoma, etc. This medical education program is complemented by another 100 physician/observers from around the world. These professionals, who cannot practice medicine in the U.S., spend anywhere from two weeks to six months observing the care we give to patients. Also, as part of our educational mission, we have our highly respected continuing medical education (CME) events on a year-round basis, with approximately 4,000 registrants each year.

We attract the best resident applicants in the country based upon a national matching service. We typically receive 400-450 applications each year and interview 50 individuals in order to select seven new residents. Once our decisions are made, virtually all of our chosen applicants accept a position to train at Bascom Palmer.



Pictured with Dr. Alfonso and Dr. Steven Gedde, director of Bascom Palmer's residency training program, (upper right), are the 2008-2009 residents and fellows.

In our training programs and CME events, we emphasize the importance of evidence-based medicine. That means implementing the most effective treatment option based upon proven scientific research and clinical practice.

### ***Is the Institute considered a global leader?***

Bascom Palmer Eye Institute's staff is continually invited to make educational presentations at professional conferences and seminars around the world. If you added up all the airline miles of our faculty, the total would be remarkably high. Because most of these professional conferences are on weekends, we give up personal and family time to participate in these important national and international meetings. We know that part of our mission is to educate others. At the same time, these conferences provide a great opportunity for us to exchange information and bring back to Bascom Palmer fresh ideas and approaches to patient care and research.

### ***Does Bascom Palmer's medical education program have an impact on South Florida?***

Absolutely. We want to serve the ophthalmology community of South Florida as a resource to deliver outstanding patient care and provide the next generation of doctors with the knowledge and skills to deliver quality care. We also want to be positive role models so they can practice patient-centered medicine, as we do. Today, many South Florida physicians are Bascom Palmer "graduates." They serve as an important medical resource to our community and to international patients who come to Miami for diagnosis and treatment.

## **EXPANDING THE RESEARCH PROGRAM**

### ***What are your priorities for the Institute's research program?***

For the past decade, Bascom Palmer has sought to expand its research program, which is directed at diseases that affect the greatest number of patients and impact their quality of life. This includes glaucoma, retinal and macular degeneration and ocular infections. We are now expanding our vision research into hereditary eye diseases and stem cell research.

My goal is to continue to strengthen our already robust research program. Our interim director of research, Dr. Vittorio Porciatti, has done an

outstanding job of attracting and retaining some of the best research talent in the nation.

### ***Has Bascom Palmer been able to attract federal grant money in this difficult economic climate?***

One of the ways to measure the success of your research program is to measure the grants awarded by the National Institutes of Health (NIH). Bascom Palmer was awarded a core grant from the NIH. The original five-year grant was renewed in 2008 for another five years – a clear vote of confidence in our research program. Overall, our NIH funding continues to increase. In 2008, we received 18 awards from the NIH totalling \$5.5 million. Additionally, our scientists and researchers received another \$8.5 million from federal subcontracts, foundations and industry.

For the past three years, the U.S. Department of Defense has funded more than half a dozen research projects at our Institute. The goal is to find better ways to treat members of the armed forces who suffer injuries that affect their vision. We are developing techniques for armed forces medical personnel to perform when needed, to provide acute care on the battlefield, and for use during vision rehabilitation following an injury.

In recent months, our researchers have also submitted a number of grant applications under the American Recovery and Reinvestment Act program. The initial responses have been very favorable, and I am confident that we will do well.

In addition to federal funding, Bascom Palmer's researchers also receive grants from the pharmaceutical industry, including both unrestricted awards and funds dedicated to specific clinical research programs. Clearly, the pharmaceutical industry sees the value of having an institution like Bascom Palmer continuing to do important research. We also receive research funding from organizations and foundations such as Research to Prevent Blindness, Jewish Guild For The Blind, and Hope For Vision. An extremely important source for support also comes from philanthropic individuals.

### ***What about collaborations with other University of Miami programs?***

We have interdisciplinary programs with other departments within the University of Miami (UM). For instance, our researchers have collaborating



projects with UM's Hussman Institute for Human Genomics, Stem Cell Institute, Diabetes Research Institute, Rosenstiel School of Marine and Atmospheric Science, Miami Project to Cure Paralysis and Sylvester Comprehensive Cancer Center, to name a few.

## REACHING OUT TO THE COMMUNITY

### *Please discuss Bascom Palmer's extensive community outreach programs.*

Community outreach remains a vital part of our mission at Bascom Palmer. Under the leadership of Dr. Richard Lee, who is medical director for our community outreach and volunteer programs, Bascom Palmer conducts free vision screenings in South Florida. Another example is our participation in the Congressional Glaucoma Caucus Foundation program, which engages medical students, residents, fellows and faculty as volunteers. I recently volunteered at a weekend screening program at a local church. Using Bascom Palmer's Vision Van, our fully equipped mobile eye clinic, we saw 400 people with no health insurance, and identified several patients who needed referrals for further eye care.

We also have a long relationship with the people of Haiti. Dr. Lee organizes our annual outreach program to Haiti. Each year, a team consisting of our residents, fellows and volunteers travel there to conduct eye surgeries, screen patients and educate health care professionals. He is also coordinating our medical teams that have been traveling to Haiti since its catastrophic earthquake. (See related story, page 12.)

### *How else do you help the community?*

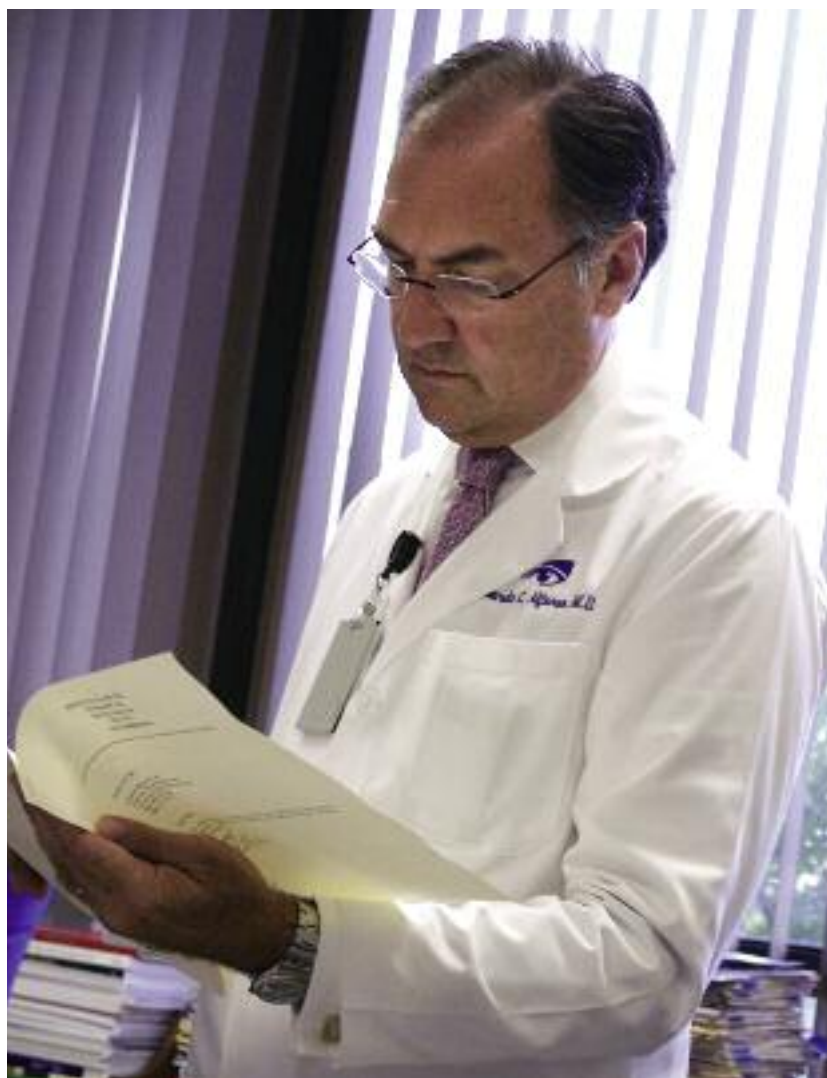
One of our residents, Thomas Shane M.D., has launched a new program, "Eyeglasses Library," which provides ready-made glasses for people in need. We are collecting used eyeglasses from patients and volunteers, including the Florida Lions. Then, using donated funds, we purchase new lenses for these frames for only \$1. If we identify a correctable vision problem in one of our community screenings, we can immediately provide a new pair of eyeglasses on site. It's an innovative approach that helps both children and adults. We get many comments like, "My world has opened up to me, now that I can see." In fact, Dr. Shane recently took 1,500 pairs of eyeglasses to Haiti. We found during our medical missions to Louisiana, following

Hurricane Katrina, that when disaster strikes, people lose their eyeglasses, thus making them more susceptible to injury.

As another example, some of the homeless in South Florida cannot hold a job simply because they cannot see. If we can get them eyeglasses, they can function again. It might be as simple as being able to fill out a job application or read a doctor's instructions about when to take their medication. Providing free eyeglasses can be a giant step toward getting them involved in the world again.

### *Do you have any further comments?*

I am honored to lead this extraordinary organization that is known worldwide for its commitment to excellence and innovation. It is a privilege to work with the Bascom Palmer team, who is committed each day to delivering exceptional patient care, cutting-edge research and the finest ophthalmic education.



# ‘Miracle’ surgery restores woman’s sight after nearly a decade of blindness



Sharron “Kay” Thornton never thought she would see again. Blinded nearly a decade ago, the 60-year-old resident of Smithdale, Mississippi, had to rely on her children and friends for day-to-day support. Unable to cook, watch television or play cards, she had never seen her youngest seven grandchildren. But that was before a “miracle surgery” at Bascom Palmer restored her vision using her eyetooth.



## Bascom Palmer team implants tooth prosthesis in first U.S. procedure

"When they took the bandages off my eyes, and I could see shapes and colors, it felt just like Christmas," says Thornton. "My family and friends had been praying for this day to finally happen. Now, I can take care of myself again, and I can finally see my grandbabies."

Certainly, Thornton understands that sight is a precious gift. In 2000, she was blinded by Stevens-Johnson Syndrome, a rare, serious skin condition that destroyed the cells on her skin, hair, fingernails, toenails, and the surface of her eyes, leaving her blind. Although most of the cells eventually grew back, the loss of vision caused by severe scarring of the cornea – the protective cover of the eye – meant that Thornton had to depend on her three children and family friend, Rick Brister.

For nine years, Thornton sought a cure for her blindness, but none of the treatments, including a 2003 stem cell procedure at Bascom Palmer, were successful. "I thought about suicide," Thornton, says, "but then I asked God to help me. I couldn't do it by myself. He taught me patience, and I never gave up."

Thornton's persistence and faith paid off. In March, a multidisciplinary team led by Victor L. Perez, M.D., associate professor of ophthalmology, began a series of six complex surgical procedures, typically lasting eight hours each. By using a canine tooth as the biological base for a prosthetic lens, Perez was able to restore sight to Thornton's right eye – the first time this complex procedure had been performed in the United States.

"This surgical treatment has now been shown to be effective as a solution to end-stage corneal disease," says Perez. "It can be used in cases where severe corneal scarring blocks vision and corneal transplants are no longer an option, but the eye's internal structures and optic nerve remain healthy." This procedure will not work for patients with glaucoma, retinal problems or hereditary eye disease.

After Perez removed the bandages on Labor Day weekend, Thornton was immediately able to recognize people's faces. A few days later, her vision had improved to the point where she could read a newspaper, watch television and even see white clouds float through a blue sky. "We all take our sight for granted, not realizing that it can be lost at any moment," she says. "This truly is a miracle."

## A pioneering procedure

While using a patient's "eyetooth" to help cure blindness may seem like a radical concept, the surgical technique – called modified osteo-odonto-keratoprosthesis (MOOKP) – was first developed in Italy several decades ago. This surgery is used as standard care in other parts of the world.

For Eduardo C. Alfonso, M.D., chairman of Bascom Palmer Eye Institute, the pioneering procedure provides an excellent example of how the physicians at the University of Miami Miller School of Medicine share their knowledge and skills to help patients with otherwise intractable conditions. Speaking at a September press conference, Alfonso said, "This procedure was a true marriage of medicine, dentistry and ophthalmology. I'm very proud of the interdisciplinary team who collaborated for many months to make this day possible."

As a cornea specialist trained in the use of multiple prosthetic devices, Perez led the surgical team, which included an oral surgeon, oculoplastic surgeon, anesthesia specialists and surgical nurses. A key participant was Yoh Sawatari, D.D.S., assistant professor of clinical surgery at the Division of Oral and Maxillofacial Surgery and Dentistry at the University of Miami Miller School of Medicine, who extracted Thornton's canine tooth and surrounding bone. Bascom Palmer's Steven I. Gayer, M.D., associate professor of clinical anesthesiology, led the anesthesia team, and ophthalmologists Sonia H. Yoo, M.D., and Thomas E. Johnson, M.D., helped care for Thornton during her stay.

Dr. Robert E. Marx, chair of the Division of Oral and Maxillofacial Surgery, helped plan the dental surgery, while Bascom Palmer research associate professor Jean-Marie Parel, Ph.D., Ing., ETS-G, the Henri and Flore Lesieur Chair in Ophthalmology, designed the prosthetic lens. "We carefully measured the biometric thickness of the eye wall using ultrasound," Parel says. "Then we had to machine the tooth by hand to form the foundation for the prosthesis, as there is no tool for this."

But Perez says the most important member of the team was Thornton herself. "Kay had the bravery and courage to undergo this adventure with us. She was responsible for making decisions at every stage of the procedure."

Since announcing the success of the MOOKP, Perez has received a steady flow of requests for information and potential patient referrals. "We now have a waiting list of 10 patients," he says, including inquiries from the U.S.



Some members of the Bascom Palmer surgical team (top row): Dr. Victor Perez; Linda Bourinot, R.N.; Dr. Jean-Marie Parel; Barbara Hidalgo; Janet Moreno, R.N.; Rhonda Barnes, R.N.; and Dr. Eduardo Alfonso join (bottom row) Kay Thornton and family friend, Rick Bristler.

“I’m so thankful that the doctors at Bascom Palmer never gave up on me. They kept searching for an answer and they found one. Now, I’m hoping that this surgery will help a lot more people as well as me.”

—Sharron “Kay” Thornton

Department of Defense about helping blinded military personnel. “We believe there are 200 or more patients with corneal blindness in the U.S. who can be helped by the surgery.”

As Alfonso says, “Through the work of Dr. Perez’s team, patients in the United States now have access to this complex surgical technique, which has been available only in a limited number of centers in Europe and Asia. It dramatically enhances our ability to treat patients with severe corneal conditions.”

### How it works

Back in 1963, an Italian physician, Benedeteo Strampelli, M.D., came up with the idea of using a patient’s tooth for a vision-restoring prosthetic device for blind patients with no other hope for treatment. He realized that the tooth, combined with adjoining bone and cartilage, could provide a stable, living platform that could receive nutrition from the eye and grow into a single piece with the

cornea. However, there were problems with this MOOKP procedure that prevented it from catching on for decades.

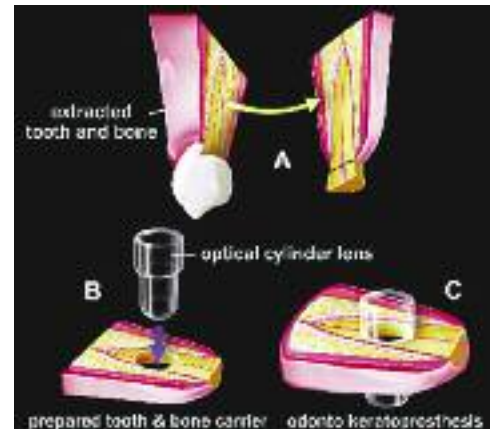
In the 1980s, Italian ophthalmologist, Giancarlo Falcinelli, M.D., developed a modified version of the tooth-lens procedure. It involves the removal of the lens and iris and a partial vitrectomy, as well as the placement of a larger-diameter 3-mm lens cylinder in the patient’s eye. “Today, surgeons follow that process,” says Perez. “The few groups that have tried to change it have encountered some complications.”

In 2005, Falcinelli published the results of his work, showing highly successful outcomes with a group of 181 patients. Since then, MOOKP has spread around the world. In Ireland, for example, a worker’s sight was restored after his cornea was destroyed in an explosion at a recycling plant.

In MOOKP, the patient’s tooth and surrounding bone are carefully removed from the mouth. Perez says the canine is usually used because it has just a single root and can be easily accessed by the dental surgeon. “It’s important to incorporate the maxillary bone as well,” he says, “in order to maintain the integrity of the prosthesis.”

Next, the tooth is shaved and sculpted to fit into the eye. A small hole is then drilled into the tooth to hold an optical lens cylinder. To turn the tooth and lens into a lasting bio-integrated unit, they are implanted under the patient’s skin. “The only way a plastic cylindrical lens will survive is when it is integrated into the body’s biological surface,” Perez adds.

In Thornton’s case, the tooth-lens prosthesis was originally implanted in her cheek, but a sinus infection forced the team to move it to her chest.



Modified Osteo-Odonto-Keratoprosthesis

“That was the only complication during the six-month surgical process,” Perez says. Otherwise, the Bascom Palmer procedure followed the MOOKP guidelines established by Falcinelli and his son, John Falcinelli, M.D.

Meanwhile, Perez prepared the surface of the eye for implantation of the prosthesis by removing scar tissue surrounding the damaged cornea. About one month after the initial surgery, mucous material was collected from the inside of Thornton’s cheek and used to cover and rehabilitate the surface of the damaged eye. Perez compares this to “bringing water to the desert,” since this helps restore the health of the damaged eye tissue.

In the final phase of the treatment process, which occurred in early September, the prosthesis was removed from Thornton’s chest and implanted into her eye. The prosthesis was carefully aligned with the center of the eye, and a hole was made in the mucosa for the prosthetic lens. Because the lens protrudes slightly from the eye, it will eventually be covered with a cosmetic shell painted to look like Thornton’s other eye for a more normal facial appearance.

“Each stage of the process takes about eight hours of surgery,” says Perez, noting that a typical ophthalmic procedure may take 15 minutes to one hour. “It takes a special place, like Bascom Palmer, for this treatment to even be considered as an option.”

To prepare for the MOOKP procedure, Perez trained with the Falcinellis and consulted with them throughout the months-long process. “Our goal was to successfully reproduce the Italian team’s success,” Perez says. “According to Dr. Falcinelli, our patient’s initial outcome – 20/60 vision – was one of the best early results they have seen.” In fact, after removing a protective tube from Thornton’s eyes, her vision improved to 20/30 with glasses for distance, and 20/25 with glasses for near vision.

“If there isn’t any infection, I’m optimistic we can

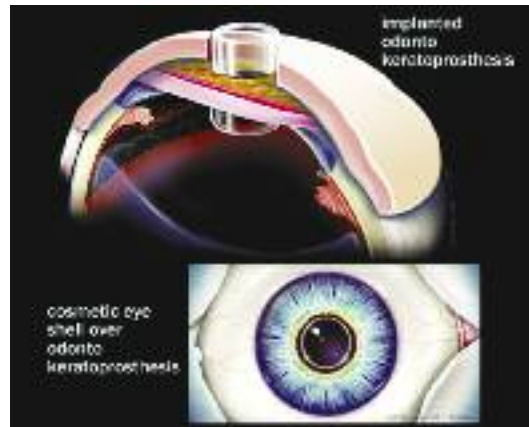
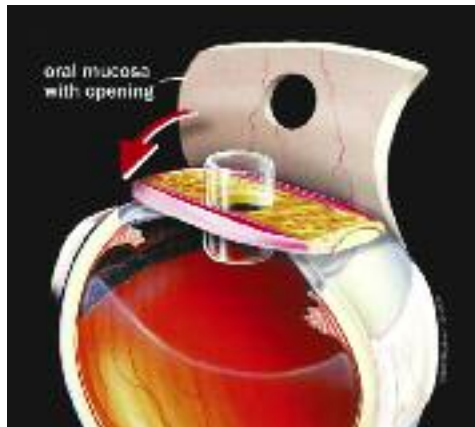
preserve her vision for the next 10 years,” Perez says. In the meantime, he’s not planning to operate on Thornton’s other eye. “We’re keeping it as a spare tire,” he says. “If something goes wrong with the first eye, we can do the other. That way she will always have a chance at vision – as long as she takes good care of her teeth.”

### A new treatment option

With the success of MOOKP, Perez is delighted to have another option to help patients like Thornton with end-stage corneal disease. “We needed to find a treatment that would work for these patients,” he says. “I’m very excited for Kay. She really worked hard for this.”

For Thornton, the successful surgery means she can return to a normal life on her farm in Mississippi. “I love to fish, and my son wants to take me fishing,” she says. “I want to get back in the kitchen cooking and I want to ride my ‘bad boy’ buggy around the farm. Most of all, I want to play with my grandbabies.”

And Thornton has nothing but praise for the entire University of Miami medical school team. “I’m so thankful that the doctors at Bascom Palmer never gave up on me,” she says. “They kept searching for an answer and they found one. Now, I’m hoping that this surgery will help a lot more people, as well as me.”



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# David T. Tse, M.D., F.A.C.S.

## When eye conditions get tough,



Whether attacking a deadly cancer, helping a child born without an eye, or exploring ways to restore vision after a traumatic accident, David T. Tse, M.D., F.A.C.S., takes on the toughest surgical challenges.

A member of the faculty since 1986, Tse specializes in oculofacial plastic surgery, reconstructive surgery, orbital surgery and oncology. “In our subspecialty, we are frequently confronted with some lethal orbital conditions where patients can go blind or even die,” he says. “I subscribe to the philosophy that engaging in research activities is a stimulating and effective way of encouraging the imaginative thought necessary to avoid regimented treatment approaches. By participating in this dynamic interplay, I believe one can advance the standard of patient care to preserve vision and save lives.”

In a recent ceremony, Tse was named the inaugural holder of the Dr. Nasser Ibrahim Al-Rashid Chair in Ophthalmic Plastic, Orbital Surgery and Oncology, reflecting his dedication to the field and acknowledging contributions to training ophthalmologists in the Middle East.

“We have been able to establish a very good educational connection to the region and have trained more than 40 fellows to date,” he says. “As a result, the Bascom Palmer name is recognized as the finest center for eye care and ophthalmic learning in the world. We get a steady flow of referrals from the Middle East, including one surgical patient [Dr. Nasser Ibrahim Al-Rashid] who was very satisfied with our services and graciously endowed a chair for me.”

### FINDING AN EFFECTIVE APPROACH TO A DEADLY CANCER

As a researcher, Tse has focused on turning laboratory discoveries into effective methods of treatment, a process called translational research. “We need to understand the molecular underpinnings of diseases,” he says. “As a surgeon, I tend to look for surgical remedies to solve patient problems, but in reality, the clues often lie in the molecular mechanism causing the disease.” Tse adds, “If we are to advance, the need for basic research to solve pressing clinical

“For me, every problem provides an opportunity to innovate and to find new treatment remedies. At Bascom Palmer, we are continually searching for new ways to improve the current treatments. After all, many of our patients are here because they have exhausted conventional therapies and still have a problem.”

— David T. Tse, M.D., F.A.C.S.

# Tse gets tougher

problems cannot be over emphasized. Medicine is a dynamic field where change is a constant, and the future is just an experiment or two away."

That multidisciplinary approach has paid off for Tse and his patients in treating cancer of the lacrimal gland, an organ responsible for tear production. "The lacrimal gland is a structure inside the orbital socket that is prone to spawning tumors," says Tse. "While these can be benign as well as malignant, there is one very aggressive form called adenoid cystic carcinoma, where the 10-year survival rate is only 20 percent. Surgical intervention alone is often ineffective and, in rare instances, potentiates tumor extension," Tse notes.

Therefore, Tse has developed a different approach that involves using chemotherapy to shrink the tumor before any surgical manipulation. The first step involves inserting a catheter in the patient's groin to deliver a high dose of chemotherapy directly into the artery serving the lacrimal gland. "Unlike most of the body's organs, this gland is served by one artery and one vein," Tse says. "That means we can infuse a high concentration of chemotherapy into the tumor without being toxic to the patient." The tumor will absorb most of that medication and by the time the drug reaches the venous circulation, the concentration has dropped to a safe level. Normally, after two cycles of chemotherapy, the lacrimal tumor shrinks significantly. Then the Bascom Palmer orbital surgery team goes to work, removing the diseased gland.

"This treatment strategy has achieved a survival rate of over 80 percent – a dramatic improvement over surgery combined with radiation," says Tse, who pioneered this treatment more than a decade ago. "Most orbital surgeons around the world are now considering this treatment option in a disease that's very lethal," says Tse. "In that regard, we have initiated a dialogue with the global medical community and become a thought leader in this area."

Now, Tse is taking the next step forward, looking at the molecular clues of lacrimal gland cancer. "By deciphering the genetic information, we can find even better ways to attack this cancer and improve survival. We are looking at tumor cell markers and other

genomic information that would permit us to tailor the therapy with the aim of delivering a pinpoint strike to the tumor without much collateral damage."

## HELPING CHILDREN BORN WITHOUT AN EYE

There are other ophthalmic conditions where effective treatment has been both elusive and costly. One example is children who are born without one eye, a congenital defect that typically results in lifelong facial disfiguration. "In the absence of an eye, the surrounding bone structure called the orbit will fail to grow," says Tse. "Therefore, one side of the face will grow normally and the other will be smaller."

Traditionally, oculoplastic surgeons would use a series of ever-larger implants to expand the orbital bone structure. This expansion process involves multiple surgeries over a course of several years for the child, whose bony structure development is delayed. "When you have to do several surgeries and still don't have a good cosmetic outcome, there's something wrong with the current method," says Tse, "and this dilemma offers an opportunity to innovate."

In a strategic collaboration with a local medical device manufacturer, Tse recently patented a new tissue expander for the orbit. This is an expandable balloon anchored to the socket bone by a titanium plate so that the device will not move. By inserting a needle into the center, the oculoplastic surgeon can gradually inflate the balloon with different volumes of fluid, eliminating the need for repeated surgeries to insert larger solid-ball implants. By inflating the balloon serially, the device can exert sustained pressure against the surrounding orbital bones to stimulate bone growth. This invention, which was recently selected as a winner in the 2010 Medical Design Excellence Awards, will reduce a substantial burden on health care by reducing the number of surgeries and, more importantly, less trauma to the child.

Three years ago, after Tse completed a proof-of-concept study, the U.S. Food and Drug Administration gave approval to use the expander in patients. Tse has now inserted it in patients with excellent results.

In his work, Tse has found that the orbital device can be inserted in babies as young as 8 to 12 months old. “We have had referrals of children age 6 or 7, when the socket is well developed, which is often a bit late to do the catch up.” He adds, “The best outcomes occur when the child is young. It definitely stimulates orbital bone growth and is well tolerated by the body.”

### ADDRESSING TRAUMATIC INJURIES

There’s no question that Tse relishes a surgical challenge. Several years ago, he decided to take a fresh look at a condition called traumatic optic neuropathy. In these patients, a blow to the head, an automobile accident, or other injury, squeezes the optic nerve running through a bony tunnel to the brain, resulting in blindness. Even though the eye is uninjured, current therapies have been unsuccessful in rescuing the injured optic nerve to restore vision.

Drawing on research relating to spinal cord injuries, Tse is exploring a new approach to treat traumatic optic nerve injury. “Because both the optic nerve and spinal cord are part of the body’s nervous system, there may be similarities in developing therapeutic modalities,” he says.

Tse is receiving research support to pursue his novel treatment approach from the U.S. Department of Defense, which is concerned about the number of traumatic optic nerve injuries suffered by U.S. military personnel in Iraq and Afghanistan.

Tse has already been successful in developing an effective treatment for patients who have suffered a traumatic injury to an eye muscle. In these cases, the patient is unable to move the eye and suffers from disabling double vision. As a result, the patient must cover the eye with a patch, leaving only one eye for vision.

In searching for a solution, Tse developed an eye-muscle prosthesis that consists of a spring-like coil insulated by a special polymer. The prosthesis aligns the injured eye and allows it to move because of the spring. It then recoils back to primary position to eliminate double vision.

“Normally, healing in the eye socket would form scar tissues around a coil to immobilize its function,” Tse says. “So in collaboration with industry, we have identified a way to put an ‘insulation’ around the coil using a non-reactive polymer that does not invite scarring. It’s an excellent combination that produces a

## Nasser Al-Rashid endows chair for David Tse



Fahad Al-Rashid, Ibrahim Al-Rashid,  
UM President Donna Shalala, Dr. Eduardo  
Alfonso, UM Miller School of Medicine Dean  
Pascal Goldschmidt, Dr. David Tse

Nasser Al-Rashid, Ph.D., is the founder and chairman of Rashid Engineering in Riyadh, Saudi Arabia. One of 16 children, Dr. Rashid grew up in a modest mud house in an Arabian desert. He lost the vision in his left eye at the very young age of 12. Through hard work, determination, perseverance and a Saudi government scholarship program, he was able to attend the University of Texas in Austin. He graduated with a bachelor of science degree in civil engineering and earned his doctor of philosophy degree from the same institution.

After completing graduate studies, Al-Rashid joined the faculty of King Fahd University of Petroleum and Minerals in Dhahran, Saudi Arabia. He was first appointed director of construction and campus development, advancing to become dean of business affairs and then dean of engineering.

In 1975, he left academia to establish Rashid Engineering in Riyadh. The company began with a small contract when King Khaled asked Al-Rashid if it was feasible to build a first-class hotel in eight months in Taif, a summer resort in the Kingdom, in time for the coronation ceremony. When Rashid Engineering completed the task on schedule, the feat was etched into the annals of Saudi construction lore.

In the ensuing decades, the firm played a pivotal role in the country’s economic evolution, participating in more than 90 major projects, including hospitals, schools, conference centers and government complexes. He was the principle architect and builder of the largest and most modern eye hospital in the Middle East, the King Khaled Eye Specialist Hospital in Riyadh.



working mechanism so the patient can move the eye by restoring part of the lost eye-muscle function. We are still refining the prosthesis and the anchoring platform.”

### TREATING SEVERE DRY EYE SYNDROME

Tse is also addressing the problem of severe dry eye syndrome, an uncomfortable, vision-threatening chronic condition frequently found in patients over age 50. Dry eye can occur when the lacrimal gland fails to produce enough tears or when moisture cannot flow through the tear film to clean the surface of the eye.

Recent studies show that many times dry eyes may be related to a buildup of inflammatory chemicals in the tear film that trigger a feedback inhibition of tear production. Tse’s innovative treatment strategy involves “tricking” the brain into overriding the body’s automatic feedback mechanism. By putting an electrode into the bony socket next to the lacrimal nerve, he then stimulates the lacrimal nerve to override the neural inhibition mechanism, leading to tear production.

Tse says he got the “signaling” concept from other surgical subspecialties. For instance, urologists use

electrodes to treat incontinence, and spinal cord surgeons can implant an electrode to stimulate the patient’s diaphragm to promote movement.

Two years ago, Tse and Dr. Andrea Lora received an industry grant to initiate a proof-of-concept study. By using optical coherence tomography, they were able to demonstrate an increase in tear volume production in a preliminary study. Now they are seeking additional funding to move Tse’s research to the next stage.

### TRAVELING THE ROAD TO ‘MASTERY’

As Tse looks ahead to the next decade of research, education and patient care, he believes Bascom Palmer’s ophthalmic surgeons will continue to move forward on the road to mastery. “Our group has achieved excellence in multiple areas,” he says. “The goal for our service is to achieve mastery in multiple disease entities through translational research. We strive to carry on the goals of the organization: to continuously improve what we do best; to provide excellent patient care; and to inspire continual learning. Doing so assuredly will improve the quality of the oculoplastic practice to serve the public.”

“My father has an inescapable belief in bettering the world and this gift makes an ongoing family commitment to advancing medical research and charitable giving.”

– Ibrahim Al-Rashid speaking at the chair ceremony for Dr. David Tse on behalf of his father, Dr. Nasser Ibrahim Al-Rashid

Also known as a great humanitarian and philanthropist, Al-Rashid has contributed to worthy causes throughout the world. Following his support of St. Jude Children’s Research Center in Memphis, Tennessee, he donated the funds to build the King Fahd Children’s Medical Center in Riyadh. Modeled after St. Jude, the hospital treats Saudi children with cancer free of charge. Al-Rashid donated the facility to the government. He also built, equipped and staffed a modern eye clinic in his home village. He was recognized by the University of Texas (UT) as a distinguished graduate of the College of Engineering in 1980 and in 1990, honored as a distinguished alumnus of UT at Austin. The Dr. Nasser Al-Rashid Strength and Training Center in Austin is named in his honor.

For more than 20 years, Al-Rashid has supported Tse’s to advance research in finding life-saving solutions for conditions that are dear to Al-Rashid’s heart: orbital cancers and children born without an eye. “Dr. Tse’s work with my father’s blind eye, and maintaining the vision in his good eye, has made him a hero to my father and our family,” said Ibrahim Al-Rashid at the chair presentation ceremony. “Our family owes Dr. Tse a profound debt of gratitude. I hope this endowment gives due recognition to him in some small way.” The investment in Tse’s research activities will provide support for oculoplastic vision research, including orbital cancer therapy, congenital socket abnormalities and development of an eye muscle prosthesis.

# Abigail S. Hackam, Ph.D.

## Seeking new ways to protect photoreceptors in the retina

In degenerative diseases of the retina, such as retinitis pigmentosa and age-related macular degeneration, the light-sensing photoreceptor cells gradually die, leading to vision problems and eventual loss of sight.

Abigail S. Hackam, Ph.D., assistant professor of ophthalmology, has been studying how to protect the eye's photoreceptors and prevent blindness. "The treatment of retinal degeneration diseases requires a better understanding of the molecules involved in regulating photoreceptor survival," she says.

Since joining Bascom Palmer six years ago, Hackam has made steady progress toward that goal. She has identified the molecules involved in photoreceptor death and been able to isolate the genes that may "switch" the production of these molecules on or off.

"We have been able to preserve the photoreceptors in the laboratory," she says. "What's exciting is that the proteins we use to save these cells are found normally in the retina," she adds, noting that her project recently received a research grant from the federal government.

Hackam's work has involved an analysis of the Wnt family of proteins, which are vital to embryonic development as well as for retinal health. "We need these protective proteins before birth and throughout our lives," she says. "They are highly regulated by the body. If we can find a way to send a signal that stimulates their production, we may be able to protect the retina from degenerative diseases."

Her experiments could also indicate whether general therapeutic intervention or highly-focused treatments would be most effective.

Another of Hackam's studies concerns the impact of these protective proteins on the retinal ganglion cells, research that could one day have an affect on glaucoma treatments. She says, "We can already protect the ganglion cells in the lab, and eventually we may be able to do the same in humans."

Hackam brings a strong background in genetics to her work with retinal diseases. She completed post-doctoral training in Canada, working on Huntington's disease, an inherited degenerative brain disorder that leads to the death of nerve cells. "The same protein mechanisms that affect the central nervous system also affect the retinal cells," she notes.

Hackam is also hoping that a better understanding of these retinal proteins may help ophthalmologists in their fight against cancers. She is studying whether manipulating the Wnt signaling pathway could be a therapeutic strategy for retinoblastoma, the most common primary intraocular eye cancer in children. "In these cases, we don't want to protect the cells, but to find proteins that kill cells selectively," she says.

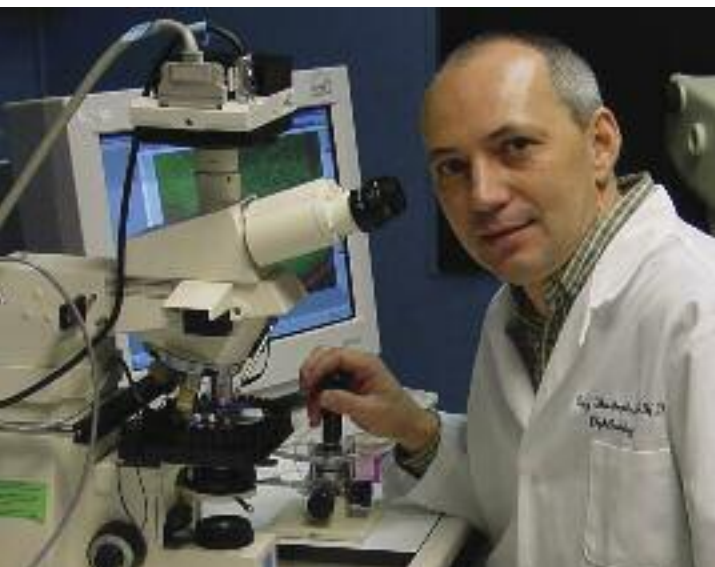
"Some of the major pharmaceutical companies are interested in these big protein molecules, and their active participation in this field will be helpful to advancing our knowledge."



If we can find a way to send a signal that stimulates the production of protective proteins, we may be able to protect the retina from degenerative diseases.

# Valery I. Shestopalov, Ph.D.

Research to revolutionize diagnostics and treatment in ocular infections



By studying the diversity of bacteria on the surface of the eye, Valery I. Shestopalov, Ph.D., is seeking new ways to detect and fight infectious ocular diseases. Traditionally, ophthalmologists have focused only on the pathogens which are microbes found on inflamed eyes that can cause vision problems. “We are discovering that microorganisms are much more abundant on healthy eyes than previously thought, many of which are supportive and helpful species,” says Shestopalov, an associate professor, who notes that more than 100 trillion microbes inhabit the human body.

In 2008, Shestopalov teamed with Bascom Palmer chairman Eduardo Alfonso, M.D., and Darlene Miller, D.H.Sc., at Bascom Palmer’s ocular microbiology laboratory, to analyze and catalogue the microbial inventory of the ocular surface. After taking specimens from healthy volunteers, they used the latest gene-sequencing technology to identify the DNA for each species of bacteria. Then, working with bio-informatics experts from Argonne National Laboratory in Illinois, the Bascom Palmer team characterized hundreds of bacterial species. “This will serve as a foundation for development of newer diagnostic tools for pathogen detection in ocular infectious diseases,” Shestopalov says.

We could potentially treat a disease like glaucoma by making a subtle adjustment to the glial cells, without having to touch the neurons in the eye.

Several years ago, Shestopalov investigated a novel communication pathway that allows proteins and other macromolecules to pass through a network of membrane-fusion pores within the lens. For this work, which led to a better understanding of the development of the lens, Shestopalov received the prestigious U.S. President Early Career Award from President George W. Bush.

To gain a better understanding of glaucoma and other optic nerve disorders, Shestopalov’s current research is focused on glial cells that provide support and nutrition to the neurons carrying visual images to the brain. “These supportive mechanisms are important in degenerative diseases because we find increasing evidence that neurons in the eye die after being neglected or poisoned by glial cells,” he says.

Using the tools of molecular biology, functional genomics and bioinformatics, Shestopalov has found that inflammation initiated by the glial cells can affect the neurons in conditions like glaucoma, retinal ischemia and multiple sclerosis.

“We have found that manipulating a single gene in the glial cells could dramatically change the outcome of a degenerative disease,” Shestopalov says. “That means we could potentially treat a disease like glaucoma by making a subtle adjustment to the glial cells, without having to touch the neurons in the eye. That opens the possibility of therapy by creating a more healthy and supportive environment for the neurons in the retina.”

After seven years of basic research in experimental models, Shestopalov says the next step will be to see if the laboratory findings can be translated to a clinical setting. “It typically takes 10 years for this type of work to be ready for clinical studies,” he says, “but we hope to improve ocular pathogen diagnostics sooner. It’s given me great satisfaction to see the progress of our research and what that could eventually mean for Bascom Palmer patients.”

# Reputation and leadership define Harry W. Flynn, Jr., M.D.

In October 2009, the American Academy of Ophthalmology (AAO) released the second edition of *Diabetes and Ocular Disease: Past, Present, and Future Therapies*, co-edited by Bascom Palmer professors of ophthalmology Drs. Harry W. Flynn, Jr. and William E. Smiddy, and Dr. Ingrid U. Scott of Pennsylvania State University. Diabetic retinopathy, a complication of diabetes resulting in damage to blood vessels of the retina, is the leading cause of blindness in patients under age 65. All people with diabetes are at risk for the disease, which can lead to variable degrees of reduced vision and, in some cases, complete blindness.

Hello Dr. Flynn,

*You're probably not going to believe this, but you saved the vision in my right eye 26 years ago (1983) when you performed a retinal reattachment, after I got hit in that eye with a baseball during high school practice. I don't know if you remember me. I wanted to THANK YOU SO MUCH for your wonderful and miraculous work, and you are a person whose name will stay with me for the rest of my life because of what you've done to help me.*

*It's great to know that one of the best ophthalmologists in the world is still helping people retain their vision. God bless you Dr. Flynn, and even though I could never thank you enough, thanks again.*

Respectfully Yours,  
Ralph D. Torelli

Flynn, who also was co-editor of the 400-page first edition in 1999, is holder of the J. Donald M. Gass Distinguished Chair of Ophthalmology at Bascom Palmer Eye Institute. He is an internationally known retina specialist and an expert in the field of diabetic retinopathy. The newest edition of the hard-cover textbook was requested by the AAO. It is a compilation of the current basic science and clinical information on diabetic eye disease from leading authorities around the world.

The earliest stage of the disease, non-proliferative diabetic retinopathy, is associated with abnormal leaking capillaries in the retina. The later and more advanced stage of the disease, proliferative diabetic retinopathy, is characterized by abnormal growth of new blood vessels into the vitreous and on the surface of the retina.

"With early diagnosis and prompt treatment, we are capable of preserving vision before irreversible damage occurs," explains Flynn, who treats a broad spectrum of patients ranging from young people with type 1 diabetes to senior citizens with type 2 diabetes, often related to obesity. "It is much easier to preserve vision with early treatment than it is to recover vision after advanced disease has occurred."

Today, there are a number of treatments for diabetic retinopathy. For diabetic macular edema, the "gold standard" is photocoagulation (a laser procedure which seals or closes abnormal, leaking blood vessels in the retina), according to Flynn. Medications or pharmacotherapies can be injected in the middle of the eye and may be useful in reducing leakage from blood vessels affected by diabetes. In severe cases, a vitrectomy may be performed to remove blood in the vitreous and repair tractional retinal detachments caused by diabetes.

In addition to his clinical focus on diabetes-related ophthalmic complications, Flynn is a member of the Data and Safety Monitoring Committee of the Diabetic Retinopathy Clinical Research Network (DRCR). The DRCR coordinates multicenter clinical research on diabetic retinopathy and associated conditions. Currently, the network is conducting several clinical trials at numerous medical centers studying the effectiveness of various new therapies for diabetic retinopathy. Flynn states that a number of these new treatments hold "great promise" for preserving or improving vision in patients with diabetic retinopathy.



Flynn has special interests in vitreoretinal surgery, including complications of cataract surgery, endophthalmitis, retained lens fragments, dislocated intraocular lenses, and suprachoroidal hemorrhage. He is particularly interested in infections that occur following cataract surgery “in spite of new antibiotics and sterile operating room conditions.” The infections typically occur through fluids or organisms that enter the surgical incisions during the procedure or after surgery.

A prolific author and superb educator, Flynn has published approximately 300 articles in peer-reviewed journals, 58 book chapters and five edited or co-edited books.

Flynn received his bachelor of science degree at Wake Forest University and his doctor of medicine degree at the University of Virginia School of Medicine, where he also completed his residency training in ophthalmology. Following his retina fellowship at Pacific Medical Center, Flynn spent two years of active duty in the United States Army where he was a retina specialist at the Brooke Army Medical Center in San Antonio. He joined the faculty of Bascom Palmer in 1978.

Flynn’s reputation and leadership are evident in the positions he has held, including chairman of both the Basic and Clinical Science Course for the American Academy of Ophthalmology and the Retina Subspecialty Day at the AAO annual meeting. He has also served as president of the American Society of Retina Specialists, the Retina Society, and the Miami Ophthalmological Society. He has received numerous awards and honors from his professional colleagues, including the AAO Lifetime Achievement Honor Award, the Vitreous Society’s Gertrude Pyron Award and the American Society of Retina Specialists’ Crystal Apple Award.

Even more rewarding is the recognition Flynn receives from his patients. Known for his intellect, compassion, and outstanding patient care, he received the Five Star Excellence Award from Project Research Consultants. This was for scoring in the top 10 percent nationally, having received a grading of “excellent” from his patients for overall quality of care. He also continually receives the highest of scores in patient satisfaction surveys.

Flynn has greatly enjoyed the camaraderie with residents, fellows and faculty members, as well as the satisfaction of helping patients during his 31 years at Bascom Palmer.

# Bascom Palmer's ER is in good hands

## James T. Banta, M.D.

For James T. Banta, M.D., the appeal of emergency medicine came early in his residency training. Banta, assistant professor of ophthalmology at Bascom Palmer Eye Institute, is a comprehensive ophthalmologist, and medical director of Bascom Palmer's ER – the Institute's Emergency Services Department.

“The extent and severity of cases we see in our emergency room on a regular basis is unparalleled anywhere in the country.”

—James T. Banta, M.D.

On average, Bascom Palmer's emergency department in Miami sees 40 to 50 patients a day and as many as 15,000 each year, not including consultations for patients at Ryder Trauma Center or Jackson Memorial Hospital.

Banta received his bachelor of science degree from the University of Oklahoma and his medical degree from the University of Oklahoma Health Sciences Center. In 2003, he completed his residency in ophthalmology at Bascom Palmer.

“The ER is an important part of the Institute's residency training,” he says. “It covers an incredibly wide spectrum of eye problems, from the relatively simple like conjunctivitis, to the more severe like open globe injuries. Our ER covers a geographic territory that spans Florida, the Caribbean, Latin America and South America. The extent and severity of cases we see on a regular basis is unparalleled anywhere in the country.”

“It's very exciting,” he says. “You have no idea what will come through the door.”

But for all the workplace-related and traumatic ocular injuries, the most common diagnosis in the emergency room, according to Banta, is contact lens-related corneal ulcers, which are open sores on the cornea. These are usually the result of sleeping in contact lenses, not changing or cleaning lenses or lens cases adequately, or wearing cosmetic or costume non-prescription lenses. Resulting sores can be severely devastating and may lead to corneal scarring and vision loss.

Banta has also observed a recent increase in paint ball injuries, a result of a battle game where players shoot at each other using compressed-gas guns filled with paint capsules. Most paint ball injuries do not occur at regulated, commercial facilities (which mandate the full-time use of eye protection), but with unregulated, unsupervised recreational use.

“If everyone would take care of their contact lenses appropriately and wear the proper eye protection for high-risk activities, both at work and at home, our emergency department would be far less busy,” Banta muses. “At a minimum, 2mm polycarbonate safety glasses should be worn for all activities at risk for projectile injury, particularly lawn work, grinding, cutting, and hammering. Polycarbonate goggles are even safer.”

In 2007, Banta completed a three-year project, publishing *Ocular Trauma*, a 240-page comprehensive guide on ocular trauma, ranging from chemical and blast injuries, to perforating injuries. The book, he says, was a collaboration with approximately 20 residents, fellows and attending physicians, all but one of whom trained at Bascom Palmer. It has been translated into multiple languages.

“Because we see so many interesting and unique cases, I wanted to share our experience with others,” says Banta. The clinically-based book includes numerous case studies and hundreds of photographs and illustrations.



While the ER occupies about 20 percent of his time, Banta is largely focused on his comprehensive ophthalmology practice, with an emphasis on cataracts and cataract surgery. “The comprehensive ophthalmology service provides complete initial evaluations, as well as long-term care for patients with chronic eye conditions. We see everybody and everything.” Banta adds, “Comprehensive ophthalmology is often the foot in the door.”

Banta has also seen significant changes in cataract surgery since he first began performing it nine years ago. In particular, he points to the manner and speed with which the surgery is performed. “Everything keeps getting smaller,” he says, referring to the incision size (down to 2.2 millimeters from 3.2 millimeters less than 10 years ago). “The evolving technology associated with cataract surgery is simply amazing and continues to improve the efficiency and safety profile of the surgery.”

Another promising development in cataract surgery is the wide assortment of intraocular lenses that are now available for patients. New technology has produced lenses that can reduce imperfections in the cornea, and even correct certain types of astigmatism. Patient expectations, he says, “are higher than ever.”

“We continue to strive toward the goal of reducing the need for glasses after surgery,” he says. “It’s not a perfect science, but it’s moving in that direction.” About 90 percent of Banta’s cataract patients have normal, age-related cataracts. The balance are exceptional cases, including cataracts that are the result of trauma or glaucoma, and very young children whose eyes require a different approach to cataract surgery.

“Cataract surgery is my favorite thing,” he says. “It requires intense concentration and an awareness of everything that is happening. You are working in an extremely small space; it is a meticulous science.” He is currently involved in a clinical trial to determine the best timing to measure patients for intraocular lens implants. By repeating measurements at different points and studying varying outcomes, Banta and his colleagues hope to determine the optimum time to do an intraocular lens power calculation to achieve the patient’s best possible outcome.

Despite a demanding schedule, Banta recently took time to join a team of fellow ophthalmologists from Bascom Palmer and traveled to Haiti to help the many victims of January’s massive earthquake. While there, he cared for some 250 patients in a makeshift hospital, including dressing wounds and administering IV fluids. “The extent of devastation visited upon the people of Haiti is difficult to describe,” he says. “Rebuilding will be a long and arduous process, but the outpouring of aid and volunteerism I saw there was heartwarming and will eventually give way to a new, improved Haiti.”

When he’s not at Bascom Palmer, Banta enjoys fly fishing, though as an Oklahoma native, he had to transition from freshwater fly fishing to saltwater. When time permits, he kickboxes, something he calls a “great stress reliever.”

# Vision for Haiti



The University of Miami's field hospital at the Port-au-Prince International Airport opened one week after the earthquake hit. The hospital has advanced technologies and operating rooms suitable for lifesaving surgeries.

## ON JANUARY 12, HAITI SUFFERED THE MOST DESTRUCTIVE EARTHQUAKE IN ITS HISTORY.

As a result, dozens of organizations have hastened to the island nation to help in any way possible. The University of Miami Miller School of Medicine and the Bascom Palmer Eye Institute have been among them.

Under the superb direction of Richard K. Lee, M.D., Ph.D., who is organizing Bascom Palmer's medical relief efforts, the first team from Bascom Palmer arrived in Haiti just 48 hours after the earthquake. The team arrived with ophthalmic equipment and supplies and offered general medical aid and eye surgery. "We are poised to help the Haitian people for a long time," says Eduardo C. Alfonso, M.D., chairman of Bascom Palmer Eye Institute. "We expect more medical teams from Bascom Palmer will go to Haiti in the next few months and years. Using our medical expertise to help the victims, and expressing our compassion for them, will remain a priority for our faculty and staff."

Below are excerpts from Bascom Palmer's faculty and staff who traveled to Port-au-Prince. The text in its entirety can be read online at [bascompalmer.org](http://bascompalmer.org)

**JAMES BANTA, M.D., Ocular Trauma Specialist, January 16:** I returned from Haiti tonight. The extent of devastation is difficult to describe. I helped staff a makeshift hospital in two airport hangers caring for around 250 patients. The first night, I could do nothing but dress wounds, administer IV fluids, and give pain medications. I spent most of the last 24 hours splinting and casting badly broken extremities.

It is a desperate time for that poor country and the desperation is going to reach a fever pitch in coming weeks. Haiti needs money for supplies and housing. An entire generation of orphans and disabled has been introduced into an already strained, deficient system. The extent of the task at hand appears beyond daunting. There were times of hopelessness as I watched people suffer and sometimes die. Possibly even more difficult were the cries



“We expect more medical teams from Bascom Palmer will go to Haiti in the next few months and years. Using our medical expertise to help the victims, and expressing our compassion for them, will remain a priority for our faculty and staff.” — Eduardo C. Alfonso, M.D.



of the orphaned or displaced children who were often inconsolable at bedtime, their fairly resilient natures not enough to overcome the physical pain of the injuries for which they were hospitalized, as well as the emotional upheaval of losing their parents. The outpouring of aid and volunteers is heartwarming and will eventually give way to a new, improved Haiti.

**THOMAS JOHNSON, M.D., Oculoplastic Surgeon, January 20:** Tom Shane [ophthalmology resident] and I helped transfer five critically ill patients to the Israeli field hospital. We saw firsthand some of the devastation as well as a huge tent city housing displaced Haitians.

Bascom Palmer nurse, Ashlee Vainisi, scrubbed on approximately 10 amputations the first day, and surgery proceeded well into the evening. She did an absolutely outstanding job. On our second day, Tom Shane, Ashlee, and I set up an eye clinic and wound care clinic between the two hospital tents. Part of this area was reserved for the doctors who performed dressing changes. We saw over 140 patients. We also attended to dressing changes on

our inpatients, performed dilated exams, and received a few emergencies.

Tom Shane did a great job and distributed over 1,500 eyeglasses. The University of Miami hospital will soon move to an area with large air-conditioned tents paid for by Miami Heat’s Alonzo Mourning. Presently, conditions are quite cramped, and most of the staff sleep when they can. Tom Shane, Manny Paz [Bascom Palmer nurse anesthetist], Ashlee, and I found a place to lie down between the tents on tables the first night. The second night, we camped outside. Drinking water arrived on a regular basis. Food consisted of power bars, peanut butter, crackers, and occasionally, bagels and bread.

The patients were stoic and calm, but one could hear the constant cries of pain as analgesics wore off and dressings were changed. Even with the hell they were going through, patients rarely complained and were happy each time we examined and cared for them. On our rounds, Tom Shane and I encountered an 18-month old baby girl with cerebral palsy and scalp lacerations who was alone. We were walking by and heard her crying. We picked her up,

**A Bascom Palmer team prepares for travel to Haiti with medications, eyeglasses and medical instruments: Drs. Thomas Shane, Thomas Johnson, Richard Lee and Eduardo Alfonso; Ashlee Vainisi, RN, and Emmanuel Paz, CRNA**

“We are addressing the ongoing need in Haiti by routinely sending medical teams to treat patients with all levels of eye injuries. Our long-term plan is to provide Haitian ophthalmologists with resources and training so they can continue helping patients in a sustainable manner with the guidance of Bascom Palmer’s faculty and staff.” — Richard K. Lee, M.D., Ph.D.



Emmanuel Paz and Dr. Thomas Johnson (far left) assist a patient arriving at the field hospital.

fed and held her, and she seemed very happy. Thereafter, we made a point to see her and feed her several times each day.

One patient asked me to call his family members when I returned to Miami. It was a very moving experience to call them and let them know he is alive and being well cared for in our hospital camp, as they had not heard any news of him since the quake. It looks like the UM involvement will be a long-term commitment. I’m glad to see Bascom Palmer playing a vital role in the delivery of health care to this devastated country.

**ASHLEE VAINISI, R.N., Surgical Nurse, January 22:** Haiti was the most amazing – and worst experience – I could ever imagine. The word “devastation” is too flippant to use. I don’t know of a word that can adequately describe the carnage. It was like a horror or war movie; it was surreal.

When I first arrived at camp, I saw medical personnel desperately trying to locate a small tracheal tube among the supplies. They didn’t find it in time and a child died. Multiple days, I was in a makeshift “OR” doing amputations on children and young adults. We had one blood pressure cuff for 150 patients, no oxygen, and no running water to wash our hands in between cases. We used bleach to sterilize the instruments, which left them rusty and

dull. Most of the patients had gangrenous limbs. Amazingly, our makeshift surgical team showed such ingenuity and talent that out of the scores of procedures, not one patient was lost during surgery.

The Bascom Palmer “Klinik Je,” or Eye Clinic, was definitely a bright spot in the misery. In one day, Dr. Johnson, Dr. Shane, and I did 140 eye screenings and gave out scores of glasses. We had a lovely young Haitian gentleman, Johnny, who served as our interpreter. There were lots of smiles. The patients were so grateful to have a replacement for the glasses lost when they were running for their lives.

I spoke with a Haitian gentleman on my plane ride back who stated that despite my feeling that I didn’t help enough, “without the little drops of water, there would be no ocean.” I was grateful for the life we have here in the USA, and for the amazing creativity and dedication of the volunteers who made so little go so far. I hope people realize that anything they give, or do, will make a difference. A small donation can change a life, and perhaps even save one.



At the Klinik Je: Ashlee Vainisi; Dr. Thomas Johnson; Johnny, a Haitian interpreter; and Dr. Thomas Shane

Bascom Palmer’s Vision for Haiti Relief Fund underwrites continuing efforts to fly ophthalmic teams to Haiti to meet ongoing needs. For additional information, please contact Bascom Palmer’s development and marketing offices at 305 326-6190 or visit [bascompalmer.org](http://bascompalmer.org)

# Research technology conference wows investors with breadth of UM discoveries

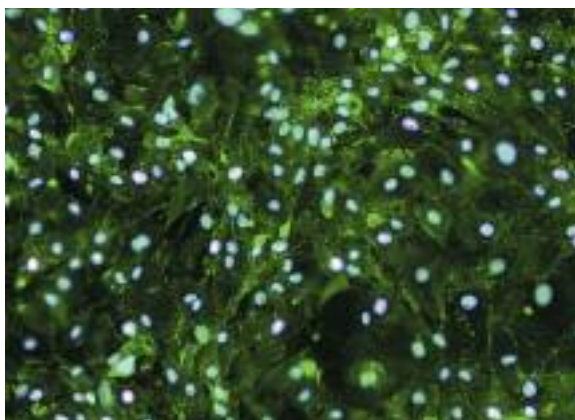
The University of Miami has helped develop a university-wide platform for technology innovation. Under the direction of Richard M. Awdeh, M.D., Bascom Palmer's director of technology transfer and innovation and assistant professor of ophthalmology, Bascom Palmer is developing internal resources dedicated to building industry relationships with ophthalmic companies and investors.

As part of a strategic plan for technology innovation, faculty members of Bascom Palmer Eye Institute played a major role in the University of Miami's second annual Innovation Technology Showcase held in Miami last November. The Showcase is designed to match researchers with investors, accelerating the process of moving groundbreaking discoveries from university research laboratories to the marketplace. University-wide, the technologies ranged from aerodynamics and power generation to allergies and immunology.

"This event allows us to show off our best innovations and get them to market quickly to further improve the quality of life for eye patients everywhere," says Eduardo Alfonso, M.D., Bascom Palmer chairman who presented an overview of Bascom Palmer's innovations with Awdeh.

The two-day conference drew great interest from technology investors eager to identify the next successful venture and Bascom Palmer faculty, researchers and physicians alike, had a strong presence. Bascom Palmer's contributions to the poster session and oral presentations represented one quarter of all the new research concepts – more than any other University of Miami (UM) academic department. UM faculty members spoke with investors about their developments, progress and the remarkable potential their discoveries hold.

This year's wide assortment of technologies reflected the ingenuity and collaboration that have been championed from the University. Bascom Palmer's presentations centered on research to improve vision. "We had several great projects this year," says Alfonso. "Of particular interest were our technologies for viral vector gene therapy by Dr. John Guy; OCT software image analysis with telemedicine applications by Dr. Delia Cabrera DeBuc; and our nanotechnology platforms for the



**Dr. Goldberg is using nanoparticles to enhance cell replacement therapies. Shown is a single layer of human donor corneal cells in preparation for cell transplantation.**

treatment of ophthalmic disease by Dr. Jeffrey Goldberg and Dr. Richard Awdeh." The venue also allowed for cross-pollination amongst different fields in engineering and medicine.

"A venture-backed start-up in cardiology, with an extremely interesting technology to monitor therapy and compliance remotely approached us," says Awdeh, "and tried to understand how we could adapt this product to ophthalmology. These interactions help us think about the diseases we treat through a different set of eyes and can lead to innovation." Other UM departments shared projects related to supersonic flight coupled with bi-directional flying, stem cell therapy for heart disease and lightweight fabric that can block out almost all damaging sun rays.

"The quality of patient care is directly related to new discoveries and inventive technology," says Awdeh. "Bascom Palmer has built its reputation upon innovation, and we will continue to advance the field of ophthalmology from our clinics and laboratories."

# Faculty News



**RICHARD M. AWDEH, M.D.**, a corneal and external diseases specialist, joins the Bascom Palmer faculty as an assistant professor of clinical ophthalmology. He received a bachelor of science degree from Emory University and was awarded a doctor of medicine degree from Yale University School of

Medicine. He completed an ophthalmology residency at the Duke University School of Medicine and a corneal and external diseases fellowship at Bascom Palmer. Awdeh is available for consultation on corneal and external diseases at Bascom Palmer Eye Institute in Miami. His research interests include presbyopia correction and high-resolution molecular ophthalmic imaging.



**MICHAEL BANITT, M.D., M.P.H.**, a glaucoma specialist, joins the faculty as an assistant professor of clinical ophthalmology. He received a bachelor of science degree in biology and chemistry from St. Louis University and was awarded a doctor of medicine degree from Wayne State University

School of Medicine. He completed an ophthalmology residency at the New York Eye and Ear Infirmary, a corneal and external diseases fellowship at Kellogg Eye Center at University of Michigan and a glaucoma fellowship at Bascom Palmer Eye Institute. Banitt, who also received a master's degree in public health from St. Louis University School of Public Health is available for consultation on glaucoma at Bascom Palmer Eye Institute in Miami. His research interests include advances in glaucoma and corneal transplants.



**ANITA GUPTA, M.D.**, a corneal and external diseases specialist, joins the faculty as an assistant professor of clinical ophthalmology. She received a bachelor of arts degree from University of California Berkeley and was awarded a doctor of medicine degree from University of California San Francisco

School of Medicine. She completed an ophthalmology residency at the Wilmer Eye Institute at Johns Hopkins Hospital and a cornea fellowship at Bascom Palmer. Gupta is available for consultation on corneal and external diseases at Bascom Palmer Eye Institute in Miami. Her research interests include advances in cataract and refractive surgery, ocular infectious diseases and corneal transplant surgery.



**AUDINA M. BERROCAL, M.D.**, a specialist in vitreoretinal diseases and surgery, retinopathy of prematurity and pediatric medical and surgical retina, has been promoted to associate professor of clinical ophthalmology. She also holds a secondary appointment at the University of Miami in the Department of

Pediatrics. Berrocal conducts research into age-related macular degeneration, familial exudative vitreoretinopathy, retinopathy of prematurity, incontinentia pigmenti and retinitis pigmentosa. She received a bachelor of arts degree from Princeton University and a medical degree from Tufts University Medical School, where she also completed her ophthalmology residency. Berrocal completed a vitreo retinal surgery fellowship at Bascom Palmer.

## Bascom Palmer recruits nationally recognized corneal specialist,



George F. Corrent, M.D., Ph.D., a nationally recognized expert in the fields of corneal and external diseases, was recently appointed to the faculty of Bascom Palmer Eye Institute as the latest step in Bascom Palmer's Naples and Collier County expansion.

Corrent has practiced ophthalmology in Naples for 10 years and has been

included among *Gulfshore Life's* Best Doctors since 2006. Corrent served as chairman of ophthalmology at Cleveland Clinic Florida from 1993-2002, and was most recently in private practice in Naples with Physicians Regional Medical Group. His research interests include advances in corneal infectious diseases and corneal healing.

He received a bachelor of science degree from Duke University, a doctor of medicine degree from the University of Texas Medical School at Houston and a doctorate in



**VICTOR L. PEREZ, M.D.**, was promoted to associate professor of ophthalmology. Recently at the center of extensive media attention for surgical procedures he performed on a Mississippi woman, restoring her sight after nine years of blindness. (See related story, page 8.) Perez is a corneal

and external diseases specialist. In addition to his faculty appointment at Bascom Palmer Eye Institute, he also has a secondary appointment at the University of Miami in the Department of Microbiology and Immunology. His research interests include immunology of corneal and limbal stem cell transplantation, ocular inflammation and autoimmune diseases of the eye, keratoprosthesis, and dry eye syndrome.

Perez received a bachelor of arts degree from Washington University and a medical degree from the University of Puerto Rico School of Medicine. He completed an ophthalmology residency at Massachusetts Eye & Ear Infirmary of Harvard Medical School, followed by four fellowships, also at Harvard Medical School: corneal and external diseases; uveitis; ocular immunology research; and immunology research.

Perez is a 2009 recipient of a \$750,000 three-year Edward N. and Della L. Thome Memorial Foundation, Bank of America, N.A. Trustee Award in age-related macular degeneration research. This award was created to advance the health of older adults through the support of direct-service projects and medical research on diseases and disorders affecting seniors. The award will fund Perez's research project, *Adaptive immunity as the missing link between oxidative stress and complement activation in the pathophysiology of age-related macular degeneration*. His project may lead to new therapies, and ultimately a cure, for age-related macular degeneration.



**STEPHEN G. SCHWARTZ, M.D., M.B.A.**, medical director of Bascom Palmer Eye Institute at Naples, has been promoted to associate professor of clinical ophthalmology. As a vitreoretinal diseases and surgery specialist, Schwartz has a keen interest in the diagnosis and management of macular degeneration,

retinal detachment, and diabetic retinopathy. He conducts research into ophthalmic pharmacogenomics. Schwartz received a bachelor of science degree from Cornell University and a medical degree from New York University School of Medicine. He also received an M.B.A. from the J.L. Kellogg School of Management at Northwestern University. He completed an ophthalmology residency at New York University School of Medicine and a fellowship in diseases and surgery of the retina and vitreous at Cullen Eye Institute of the Baylor College of Medicine.

Schwartz, the current president-elect of the Florida Society of Ophthalmology, will begin his term as president of the 500-member organization later this year. Schwartz has served on the Society's board of directors in a variety of positions since 2006 and is a recipient of its Outstanding Young Ophthalmologist Leadership Award. He is the first Bascom Palmer full-time faculty member to be elected president of the Society, although Dr. Bascom H. Palmer, for whom the Institute is named, served as president in 1948. Schwartz has also been asked to participate in the American Academy of Ophthalmology's 2010 Leadership Development Program.

To schedule an appointment with a Bascom Palmer specialist, please call 1-888-845-0002, or visit us online at [bascompalmer.org](http://bascompalmer.org)

## George F. Corrent, M.D., Ph.D.

neurophysiology from Rice University. Corrent completed an ophthalmology residency at Barnes Hospital at the Washington University School of Medicine and a fellowship in cornea and external diseases at Bascom Palmer. He will be available for consultation on corneal and external diseases in Naples and Palm Beach Gardens.

In response to increased demand, the Naples practice has grown substantially. Bascom Palmer now offers three full-time ophthalmologists in Naples and seven traveling

specialists from Miami. With Corrent's arrival, Bascom Palmer's patients will now be able to have cataract surgery, corneal transplantation, and many other surgical procedures in Naples.

The Naples center will continue to offer consultations on retinal, vitreous, and macular diseases; uveitis; corneal and external diseases; oculoplastic and orbital surgery; pediatric ophthalmology and strabismus; and neuro-ophthalmology.

# Doctors receive prestigious awards

Congratulations to Bascom Palmer professor and chairman, **EDUARDO C. ALFONSO, M.D.**, and professor **DONALD L. BUDENZ, M.D., M.P.H.**, for their recent



**Dr. Eduardo Alfonso**



**Dr. Donald Budenz**

induction into the **AMERICAN OPHTHALMOLOGICAL SOCIETY (AOS)**. With only 375 members in the United States, this prestigious and highly selective organization is dedicated to advancing the art and science of ophthalmology. Founded during the civil war in 1864, the AOS was the first specialty society in this country. Alfonso and Budenz join a select list of Bascom Palmer faculty members currently in AOS: **DRS. DOUGLAS R. ANDERSON, JOHN G. CLARKSON, RICHARD K. FORSTER, RICHARD K. PARRISH, II, and DAVID T. TSE**. Clarkson and Dr. Edward W.D. Norton, Bascom Palmer's founding chairman, each served as president of this esteemed organization.

The **ASSOCIATION FOR RESEARCH IN VISION AND OPHTHALMOLOGY (ARVO)** recently announced the 2009 inaugural class of distinguished Fellows. **DOUGLAS R. ANDERSON, M.D.**, professor of ophthalmology, is recognized at the gold level; **WILLIAM E. SMIDDY, M.D.**, professor of ophthalmology, and **ROBERT KNIGHTON, PH.D.**, professor emeritus of ophthalmology, were recognized for their accomplishments, leadership and contributions to the Association.

Fellows serve as role models and mentors for individuals pursuing careers in vision and ophthalmology research. ARVO, with 12,500 eye and vision researchers from 73 countries, is the largest eye and vision research organization in the world.

**STEVEN J. GEDDE, M.D.**, professor of ophthalmology, was named **EDUCATOR OF THE YEAR** by the *South Florida Business Journal* in conjunction with their 2009 Excellence in Health Care Awards. Gedde, Bascom Palmer's residency program director for the past 10 years, is a glaucoma specialist with a particular interest in glaucoma surgery and



**Dr. Steven Gedde**

medical education. Under Gedde's leadership, the Bascom Palmer residency program is consistently ranked the nation's best ophthalmology training program.

"We all want to make a difference in the world and enhance our profession," says Gedde. "Recognizing that I can best accomplish this by teaching others has helped me to become a more effective health care educator."

"Dr. Gedde's contribution to Bascom Palmer is extraordinary," said Eduardo C. Alfonso, M.D. "This award is a testament to his patience, kindness, passion for ophthalmic education, and his belief that through ophthalmic education, eye care around the world is improved for all patients."

Each year, 21 residents train at Bascom Palmer Eye Institute, which serves as the Department of Ophthalmology for the University of Miami Miller School of Medicine, part of UHealth – University of Miami Health System. More than 450 applicants apply annually for one of only seven positions. The three-year ophthalmology residency training program is dedicated to learning diagnosis, treatment, subspecialty training and ophthalmic surgery for all eye diseases and disorders.

# and honors

Recognized worldwide for pioneering the use of Avastin and Lucentis to treat the wet form of macular degeneration and other diseases, Bascom Palmer professor of ophthalmology, **PHILIP J. ROSENFELD, M.D., PH.D.**, continues to receive important honors and accolades. Rosenfeld recently accepted the **J. DONALD M. GASS AWARD**, presented by the Retina Society at the Retina Congress 2009, the combined annual meeting of the Retina Society, Macula Society and the American Society of Retinal Specialists. The award was presented to Rosenfeld based on his innovations and contributions to the field of medical retina.

"I am truly honored and humbled to receive this award named in honor of Dr. Gass," says Rosenfeld. "In addition to being a friend, teacher and mentor, he was an exceptional physician and brilliant scientist who influenced me and every other ophthalmologist practicing medicine today."

Gass, known as the "father of macular diseases," was one of Bascom Palmer's founding physicians and practiced ophthalmology at Bascom Palmer for 32 years. During his tenure, he published the groundbreaking book on retinal diseases, particularly those of the macula, the part of the eye responsible for central vision. The American Society of Cataract and Refractive Surgery selected Gass as one of the 10 most influential ophthalmologists of the 20th century.

Rosenfeld's most recent contributions have been in the diagnosis and treatment of "wet" macular degeneration, a blinding disease of later life. He is now recruiting patients for a new clinical trial investigating a novel therapy for "dry" age-related macular degeneration, a more common form of the disease for which there is no treatment. For more information, visit online at [bascompalmer.org](http://bascompalmer.org) and click on "Clinical Studies."



Dr. Philip Rosenfeld

The **AMERICAN ACADEMY OF OPHTHALMOLOGY'S** annual meeting is the largest and most comprehensive ophthalmic education meeting in the world. Each year, approximately 500 instruction and skills transfer courses, roundtables, scientific sessions and symposia are presented to more than 14,000 physicians in attendance. Bascom Palmer's faculty, residents and fellows offered more than 78 instructional lectures and posters at the 2009 meeting held in San Francisco.

Additionally, neuro-ophthalmologist, **NORMAN J. SCHATZ, M.D.**, professor of ophthalmology, was invited to present the prestigious **WILLIAM F. HOYT LECTURE**. Hoyt was among the first ophthalmologists to investigate visual problems in neurologic disease.

Also at the meeting, Bascom Palmer members received the following awards: retina specialist, **WILLIAM E. SMIDDY, M.D.**, received a Secretariat Award for special contributions to the Academy and ophthalmology; glaucoma specialist, **RICHARD K. PARRISH, II, M.D.**, was presented a Life Achievement Honor Award; corneal and external diseases specialist, Victor L. Perez, M.D., received an Achievement Award, and neuro-ophthalmologist, **JOHN R. GUY, M.D.**, accepted the Cless Best of the Best Award for his presentation at the meeting.



Dr. Norman Schatz and Dr. William Hoyt



Bascom Palmer recently hosted members of the Department of Defense's Telemedicine and Advanced Research Center. Lieutenant Colonel Michael Mines, M.D.; Colonel Robert A. Mazzoli, M.D.; Robert C. Read; Dr. Byron Lam; Betti Lidsky, Hope for Vision; Dr. Vittorio Porciatti; and Colonel Donald Gagliano, M.D.



Bascom Palmer ophthalmologists visit Miami Lighthouse. Owen S. Freed, chair, Miami Lighthouse Board of Directors; Virginia A. Jacko, president and CEO, Miami Lighthouse; Eneida O. Roldan, president & CEO, Jackson Health System; Dr. Eduardo Alfonso, chairman, Bascom Palmer Eye Institute.



"We Only Have Eyes for You" is the theme for Bascom Palmer's annual Evening of Vision Gala. Herme' de Wyman Miro, co-chair; Lois Pope, honorary chair; and Ari Rifkin, co-chair.

## BASCOM PALMER EYE INSTITUTE DONORS HONORED BY ASSOCIATION OF FUNDRAISING PROFESSIONALS AT ANNUAL PHILANTHROPY DAY LUNCHEON

Bascom Palmer Eye Institute proudly salutes three leading Palm Beach philanthropists and charitable foundations who were award recipients at the 2009 National Philanthropy Day luncheon.

**INTERNATIONAL SOCIETY OF PALM BEACH**, represented by **HERMÉ DE WYMAN MIRO**, was recognized as "Outstanding Philanthropic Organization." The International Society, whose purpose is to make a difference in the lives of many by giving back to the Palm Beach Community, has made 1,400 grants totaling more than \$1.7 million during the past 25 years. Bascom Palmer Eye Institute has been the grateful recipient of \$102,650.



Arthur and Sydelle Meyer

The **ARTHUR I. AND SYDELLE F. MEYER FOUNDATION** was honored as "Outstanding Philanthropic Private Foundation" for their exemplary generosity in support of Palm Beach charitable and community organizations, including Kravis Center for the Performing Arts, Norton Museum, and Jewish Federation of Palm Beach County. The Foundation also contributed generously to the building campaign for Bascom Palmer Eye Institute at Palm Beach Gardens.

**DORA BAK** was honored as "Outstanding Planned Giving/Legacy." Dora Bak was a well known Palm Beach philanthropist and painter who left a legacy of generosity and "joie de vivre" when she died in 2002 at the age of 88. Following a lifetime of giving to numerous charities, including Bascom Palmer Eye Institute, Bak increased her donations during the last months of her life, wishing to enjoy the fruits of her philanthropy. Through her estate, she provided a \$500,000 gift to support the glaucoma vision research of Dr. David Greenfield.



Bascom Palmer Eye Institute / Anne Bates Leach Eye Hospital  
Evelyn F. and William L. McKnight Vision Research Center  
P.O. Box 016880 (D-880), Miami, Florida 33101

*Images* is produced by Bascom Palmer Eye Institute of the University of Miami Miller School of Medicine with the support of the George C. Brosius Endowment Fund. *Images* is published biannually and is available free upon request.

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Blind for ten years, a Bascom Palmer patient has regained her sight—using her tooth.

See story on page 8