

EYE

JULES STEIN EYE INSTITUTE UCLA

The Future is Here! Retinal Disorders and Ophthalmic Genetics

Counseling Patients with Inherited Disease

A diagnosis of an inherited ophthalmic disorder can often come as a surprise to patients, evoking feelings of fear, anxiety, helplessness and guilt. Even when patients have been diagnosed with or have a known family history of hereditary disease, deciding to pursue genetic testing comes with emotional and practical ramifications. Genetic counseling is the process of assisting patients and their families to cope with the multiple effects of genetic disease in their lives.

Ariadna Martinez, MS, certified genetic counselor at the Jules Stein Eye Institute and member of the Retinal Disorders and Ophthalmic Disorders Division, is specifically trained, not only in the science of the discipline, but also in the art of educating, supporting and serving as a resource for those hoping to benefit from it. "Genetic counseling involves more than just communicating complex medical information and providing genetic testing to patients and their families. The biggest challenge of genetic counseling is helping families to deal with the emotional, psychological, medical, social and economic consequences of genetic disease," she explains.

As a member of the JSEI ophthalmic team, Ms. Martinez participates in the Institute's genetic research efforts focused on discovering the genes and variations that are responsible for hereditary eye conditions. She also meets with patients and their families who have or are suspected of having a genetic eye condition or who are at risk of developing such a condition. Even before the patient first appears in her office, a great deal of work must be done, including appropriate review of a patient's

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In the past decade, there has been an explosion of new knowledge, diagnostic testing and therapies for retinal conditions, particularly in the area of hereditary disorders. The ophthalmologist of today and the future needs a more complete understanding of clinical and molecular genetic principles, pharmacogenomics and the proper integration of these elements with clinical diagnostics and practice. Multidisciplinary research approaches are becoming even more necessary to address the utility of genetics as well as develop new therapeutic strategies for retinal conditions.

In January 2008, **Bartly J. Mondino, MD**, Director of the Jules Stein Eye Institute (JSEI), announced the creation of a new clinical division, Retinal Disorders and Ophthalmic Genetics, to address the rapidly developing educational, clinical and research initiatives needed in this area. "The ongoing explosion of genetic information is bringing genetics into the realm of clinical medicine, and we are quickly moving down a busy road to make treatments and cures for retinal degenerative diseases a reality. Our new division will allow us to focus more attention and resources on this burgeoning field," he said.

Michael B. Gorin, MD, PhD, Harold and Pauline Price Professor of Ophthalmology, and Chief of the new Retinal Disorders and Ophthalmic Genetics Division, explains, "The Institute has very talented vitreoretinal surgeons who also provide a lot of medical retinal services and are involved in related research. The creation of this division highlights the fact that there have been such dramatic changes in our knowledge of medical retinal disorders and such major advances in research on vascular diseases and genetic disorders, that the Institute needs a group to focus on these issues."

The new division headed by Dr. Gorin, and including **Steven Nusinowitz, PhD**, Associate Professor of Ophthalmology and Director of the Visual Physiology Laboratory, and **David Sarraf, MD**, Associate Clinical Professor of Ophthalmology, provides a wide range of highly specialized services related to medical retinal disorders. These include comprehensive care for patients who have retinal conditions, such as diabetic retinopathy, age-related macular degeneration and retinitis pigmentosa; diagnostic evaluations with state-of-the-art imaging and electrophysiological systems; genetics management incorporating mutational analysis and family counseling; and therapeutic strategies including intraocular injections and medical and laser therapies. Clinical and basic science research into retinal disorders, especially hereditary retinal dystrophies and degenerations, represents another major role of this division, as does educating the next generation of ophthalmologists.

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Dr. Michael Gorin, chief of the new division, specializes in hereditary retinal disorders and ophthalmic genetics.



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Dr. Steven Nusinowitz (standing), assisted by Staff Research Assistant Ms. Lisa Blasco, prepares a patient with Stargardt macular dystrophy for testing with the multi-focal electroretinogram, an electrophysiological test used to evaluate central retinal function.

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information and records, researching and interpreting information about the condition—how the condition is inherited and the risk that other people in the family will inherit it, determining if genetic testing is available for that condition and identifying a laboratory that performs such tests.

“An important part of my job involves educating patients and their families about the benefits and limitations of genetic testing,” Ms. Martinez notes. “There are many misconceptions about what genetic testing can and cannot predict. While genetic test results can provide an explanation of the cause of a genetic condition, often they only provide part of the explanation or no answer at all. Genetic tests are also different from other tests because the results may have implications not only to the patient but to other members of the family.”

For that reason, prior to offering a genetic test, Ms. Martinez meets with the patient and family members to present all of the collected information and explore potential emotional or ethical issues that may arise from testing. She also schedules a follow-up counseling session to disclose test results and, when necessary, identify available resources to assist patients and their families to cope with the life-altering information those tests can yield.

Ms. Martinez believes that as genetic research reveals new knowledge, the field of genetics counseling will assume an even greater role in educating patients, health care providers and government officials, and assisting in establishing policy and standards of practice. “It will also bring new and exciting options for those affected by genetically based disease,” she continues. “One day I hope to tell patients that we can change or replace the genes that aren’t working. We’re not there yet, but we’re moving in that direction for some conditions!”

JSEI genetic counselor Ariadna Martinez discusses the option of genetic testing with a patient and her daughter.



Advanced Diagnostic and Therapeutic Strategies

Dr. Sarraf, who has worked as a medical retina specialist at the Institute during the past nine years, marvels at how the field is evolving. “I remember a time when there was little or nothing that we could do therapeutically for someone who had medical retinal disorders such as wet age-related macular degeneration (AMD). For many years, these patients were treated with two types of laser therapies, neither of which improved vision. However, within the last two years, intraocular injections of drugs to inhibit vascular endothelial growth factor (VEGF) have revolutionized the treatment of wet AMD, dramatically improving the vision and quality of life of patients with this condition, and may represent a breakthrough for the treatment of diabetic retinopathy and other retinal vascular diseases in the future,” he notes.

Ophthalmology has also seen an explosion of novel diagnostic technology for inherited retinal disease. Electrophysiology testing, under the directorship of division member Dr. Nusinowitz, and advanced imaging technology available through the Institute’s laboratories, along with recent advances in genetic testing, have greatly enhanced the diagnostic capacity of the retinologist and vastly increased our understanding of retinal diseases.

“One of the clinical services in our division that really stands out is genetics counseling,” says Dr. Gorin. “We’re very fortunate to have a full-time, board-certified genetics counselor who is available to coordinate genetics counseling and molecular diagnostic testing. This service is available for all physicians and patients at the Institute, and for a variety of disorders, not only those that affect the retina. Having someone who has this kind of genetics background and is officially trained to perform these functions, ensures that we’re bringing the very best knowledge and expertise to our clinical service, as well as our research studies,” he continues.

Narrowing the Gap from Genetic Discovery to Clinical Practice

The plethora of new information about retinal disorders and ophthalmic genetics has raised as many questions as answers. There is now a strong need to translate such information to clinical practice. The process of unraveling causes of disease that may substantially influence disease incidence or treatment is in process, and scientists at the Institute are at the vanguard of this effort.

“Institute faculty have been major contributors to pioneering research on identifying the genes contributing to inherited degenerative retinal diseases, such as Stargardt disease, retinitis pigmentosa and age-related macular degeneration,” says Dr. Nusinowitz, who along with Dr. Gorin, is a member of the Institute’s Vision Science Division in addition to the Retinal Disorders and Ophthalmic Genetics Division. “The next frontier is translating gene discovery and our knowledge about genetic ophthalmic diseases into treatments for these conditions.”

Division members are currently collaborating with JSEI vision scientists **Dean Bok, PhD**, and **Gabriel H. Travis, PhD**, on studies of Stargardt macular-degeneration and work with **Deborah B. Farber,**



Dr. David Sarraf (right) reviews photographs of a patient's retina with second-year resident Dr. Sumit Shah.

PhD, DPhhc, on the genetics of the disease. The division is also involved in experimental gene therapy approaches with multiple members of the basic science division, including **Xian-Jie Yang, PhD**, who directs a gene therapy laboratory at the Institute. “We look forward to bringing in another basic scientist, hopefully in the next few months, to work on the basic issues pertaining to light sensitivity and ocular pain which has been a major problem for a number of genetic disorders, and is a major source of suffering for patients who have vision problems, but very poorly understood,” says Dr. Gorin.

Critical studies are also taking place out of the laboratory with members of the Institute’s clinical divisions—studies of non-invasive technologies for early diagnosis of diabetic retinal disease, identification of patients who may be at greater risk for complications of anti-VEGF injection therapy used to treat age-related macular degeneration, and clinical characterization of affected individuals and at-risk family members, in conjunction with molecular genetic testing, to identify the gene(s) responsible for inherited disorders that are either specific to the eye or that affect the eye as part of the medical condition.

Dr. Gorin recognizes that the contributions of JSEI scientists are part of a large landscape of research that has really moved us to a point now where molecular genetic testing for a variety of retinal disorders and treatment for retinal conditions previously considered to be untreatable are feasible undertakings. He concludes, “I think that it’s fundamental to the mission of this division to partner with other clinicians and scientists at the Institute, as well as in the greater scientific and ophthalmic communities, in this enterprise of advancing and harnessing the discoveries of modern medicine and genetics to improve the care of our patients.”

“The ongoing explosion of genetic information is bringing genetics into the realm of clinical medicine, and we are quickly moving down a busy road to make treatments and cures for retinal degenerative diseases a reality. Our new division will allow us to focus more attention and resources on this burgeoning field.”

The Indigent Children and Families Ophthalmic Care Program

The gift of sight for children and adults in our local community and beyond

Since its inception, the Jules Stein Eye Institute (JSEI) has conducted extensive outreach programs made possible by philanthropic support. For nearly twenty years, the L & S Milken Foundation has generously provided support for an indigent pediatric surgical program. Then, in 2003, The Annenberg Foundation launched the Indigent Children and Families Ophthalmic Care Program for economically disadvantaged children and adults. Other private support, including a generous gift from the Gerald Oppenheimer Family Foundation, has been directed to this initiative to fulfill a growing need in the Los Angeles area for individuals who otherwise would not have the resources to afford vision care. The program has grown considerably, and further funding is required to ensure its continuation.

Indigent Children and Families Ophthalmic Care Program

The Indigent Children and Families Ophthalmic Care Program was established as a resource for patients with no medical insurance who require eye surgery or other specialized care in order to preserve their vision. More than 47-million Americans under age 65 lack health coverage, and in California, one out of every five does not have a medical plan.

The program offers surgical services for both children and adults, as well as contact lenses for pediatric patients with congenital cataracts. Patients are referred by JSEI faculty, fellows and residents through the UCLA clinical system at Harbor-UCLA Medical Center, Olive View-UCLA Medical Center, the Venice Family Clinic and the UCLA Mobile Eye Clinic.



J.D. Zipp (right), who received corneal transplantation surgery from Jules Stein Eye Institute fellow Dr. Jared Younger (left), is grateful to the program for saving his sight.

program to treat the greatest number of patients, JSEI physicians donate their services, and the UCLA Department of Anesthesiology and UCLA Medical Center discount their fees.

In addition to providing free surgical care, the program also assists parents with the purchase of pediatric contact lenses for children under the age of five who suffer from aphakia (absence of the lens of the eye) due to a congenital cataract. JSEI provides care for 50 to 100 such infants and youngsters on an annual basis, which ensures that they receive the lenses they need for healthy vision and normal childhood development.

A Resource for Families

Another aspect of the Indigent Children and Families Ophthalmic Care Program is supplying vital ophthalmic care to economically disadvantaged adults. This resource helps to prevent serious eye problems from persisting and resulting in permanent vision loss.

To date, the diagnoses of adult patients participating in the program have included glaucoma, cataracts, corneal opacification and retinal diseases. These often difficult cases are treated with the state-of-the-art technology and expertise at JSEI. The program also provides resources to address chronic conditions and continuing care.

Bartly J. Mondino, MD, JSEI's Director, stated that the program's follow-up care component is critical. "Patients cannot be diagnosed and undergo surgery, just to be forgotten; rather, long-term care on a regular basis is needed to maintain the health status of their eyes. Clearly, this resource is critical to providing the essential surgical services for low-income and uninsured adults."

One such patient who has benefited from this funding is J.D. Zipp, a helicopter pilot, who received a corneal transplant in December 2007, after suffering severe corneal damage from an aggressive infection. J.D. was in-between contracts and had recently completed an intensive training program that depleted his savings. "It was not until this potentially devastating situation happened to me that I learned how special and invaluable this program is to patients like myself, and to future patients who may be in dire need of eye surgery but have no insurance or enough savings to cover the costs. As a pilot, I cannot stress how much the gift of sight has meant to me, and I will be eternally grateful for the excellent care we received at the Jules Stein Eye Institute."

The Future of the Indigent Children and Families Ophthalmic Care Program

JSEI is fortunate that the Annenberg Foundation established this worthwhile program and encouraged the pursuit of additional funding to carry it forward. Further philanthropic support is now needed to ensure that these services for disadvantaged families are available for years to come. For more information about this important endeavor, or to make a charitable contribution, please contact the JSEI Development Office at (310) 206-6035.



Sight is particularly precious during childhood. Perhaps the strongest endorsement of the Indigent Children and Families Ophthalmic Care Program is the change noted in each young patient's emotional, physical and mental health following surgery.

Once the patients' medical and financial screenings are completed, pre-operative tests are conducted as necessary and required surgeries are scheduled. Under the direct supervision of faculty, JSEI fellows and residents perform most surgeries, allowing them to gain important surgical experience and supporting the Institute's goal of preparing the next generation of leading ophthalmologists. Patients are also monitored during a 90-day period following their surgeries to promote a healthy recovery without complications.

Affecting Children's Lives

The Indigent Ophthalmic Care Program is especially important for children, who require procedures that cannot be delayed due to possible further damage and loss of vision. Boys and girls without medical insurance who are in need of eye surgery to correct strabismus (crossed eyes), amblyopia (lazy eye), cataract or ptosis (droopy eyelids) are eligible.

A full range of pediatric ophthalmologic services leading to, during and following eye surgery is offered, including the physician's work, operating room use, medications and hospital stays. To enable the

Ernest G. Herman Chair in Ophthalmology



Ernest Herman (right) with the Jules Stein Eye Institute's Founding Director Dr. Bradley Straatsma

How fitting that the highest honor a university accords for academic scholarship, an endowed chair, should also carry on, in perpetuity, the name of the donor, whose spirit of giving has been forever linked to the institution. Such is the case with the newly proposed Ernest G. Herman Chair in Ophthalmology, whose namesake has been a friend and supporter of the Jules Stein Eye Institute (JSEI) since its inception.

The proposed term chair will support a vision scientist or a clinician-investigator whose work emphasizes a significant area of ocular research. Like the lasting vision this endowment will provide throughout the

ophthalmic community, Ernest G. Herman has been helping people see for decades. At JSEI, he donated to an indigent care program in pediatric ophthalmology and made gifts to retina research and for retina fellowships. Over the years, his philanthropy has touched the International Council of Ophthalmology Foundation, EyeCare America and the Association of University Professors of Ophthalmology.

Bartly J. Mondino, MD, Director of the Jules Stein Eye Institute, noted Mr. Herman's broad and influential philanthropic support of ophthalmology: "In addition to his dedication to JSEI, Mr. Herman has supported many other vision-related organizations. For example, he made a major contribution that helped to establish the Straatsma Award for Excellence in Resident Education through the American Academy of Ophthalmology and the Association of University Professors of Ophthalmology. Mr. Herman's commitment to these initiatives has had an impact on a national and international level. My colleagues and I at UCLA and beyond are indebted to Mr. Herman for his insightful and generous support of this important area of medicine."

Ernest Herman, who moved from Berlin to Los Angeles as a teenager, was raised in a culture of giving. He watched his father, Berlin's largest owner of pre-World War II residential and commercial properties, donate his first restored building back to the poor to aid Berlin's reconstruction. Genteel, with a European bearing and manner, Mr. Herman has lived in the same art-filled

estate, just steps away from UCLA's north campus, for 74 years. With his business partner, Fred Keeler, he built a real estate empire that included 42 J.C. Penney department stores across the nation.

Real estate, in fact, is what brought Mr. Herman and JSEI together. After helping Dr. Jules Stein with German property investments in the 1960s, Mr. Herman became a patient (and lifelong friend) of Bradley R. Straatsma, MD, JD, JSEI's founding director. Now a professor emeritus of ophthalmology, Dr. Straatsma describes Mr. Herman as having a deep personal commitment to helping the visually impaired, particularly blind children. "The Ernest G. Herman Chair is an investment in the preservation of vision for children and adults," notes Dr. Straatsma. "I use the term investment, because successful businessmen like Mr. Herman see their charitable giving as investments in the future, and endowed chairs continue to pay back dividends for, literally, hundreds of years."

The soft-spoken nonagenarian (Mr. Herman is 91 years young) says he takes a more personal view of philanthropy, recalling a moment when he saw an entire row of blind children listening to Mozart at The Wilshire Ebell Theater. "The man who was with them said he had a client who had left enough money so that the children were able to visit every year," Mr. Herman recounts. "I thought that was such a wonderful idea. Endowing this chair at Jules Stein gives me hope that we will one day reach the point where children who cannot see will be able to see again, and their lives [with vision impairment] will be as comfortable as possible. Imagine if you could not see, you would miss all this beauty that is around us."

Jerome Comet Klein, MD Fellowship and Fellowship Lecture

Jerome "Jerry" R. Klein, MD, FACS, Assistant Clinical Professor of Ophthalmology at the Jules Stein Eye Institute (JSEI), made a generous contribution through the Irving and Estelle Levy Foundation to honor his late father, Jerome Comet Klein, MD, FACS. This gift will establish the Jerome Comet Klein, MD, Fellowship and the Jerome Comet Klein, MD, Fellowship Lecture within the Division of Orbital and Ophthalmic Plastic Surgery.

After his father passed away in 2006 at the age of 96, Jerry wanted to honor him and pay tribute to his remarkable accomplishments in medicine. Jerome C. was a leading international facial plastic surgeon in New York City and practiced for more than 50 years. In the 1950s, the senior Dr. Klein developed what is now known as the "mini facelift" surgical operation, performed under local anesthesia in his office rather than using a general anesthetic in the hospital. Jerry noted, "This method was unheard of at the time. He was truly a pioneer and heralded in outpatient cosmetic surgery."

A native New Yorker, Jerome C. was on staff at Mount Sinai Hospital and New York University Medical Center and was appointed to the New York City Board of Hospitals by then Mayor John Lindsay. In addition, he was a founding member of the American Academy of Facial Plastic and Reconstructive Surgery and the American Academy of Plastic Surgery. His philanthropic interests spanned both coasts with significant support of numerous New York City organizations, as well as contributions to various departments within the David Geffen School of Medicine at UCLA and to the Jules Stein Eye Institute. In particular, Jerome C. had a close connection with JSEI and its founding director, Bradley R. Straatsma, MD, JD. Jerry mentioned that his father "found his relationship with the Jules Stein family incredibly stimulating, personally rewarding and gratifying—it was a highlight of his medical career."

Jerry has continued this strong connection with JSEI as both a donor and a dedicated member of the volunteer clinical faculty since 1984. Jerry was inspired to make this most recent gift as a tribute to his father and his illustrious career in facial plastic surgery: "My dad was a great man, ahead of his time and a very dynamic and giving individual. It is my hope that this gift will resonate with people and help keep his memory alive." JSEI is most grateful for this enduring friendship with the Klein family over the past 30 years.



"My dad was a great man, ahead of his time and a very dynamic and giving individual. It is my hope that this gift will resonate with people and help keep his memory alive."

The late Dr. Jerome C. Klein (left) with his son, Dr. Jerome R. Klein at the Jules Stein Eye Institute's 25th Anniversary in 1991.

Marie and Jerry Hornstein Family Endowed Macular Degeneration Research Fund



Marie and Jerry Hornstein

Jerry J. Hornstein, a retired manufacturer and distributor of contact lenses, and his wife **Marie** are both Holocaust survivors from Hungary and settled independently in the United States after World War II. Marie was in Chicago on a business trip from New York when the couple was introduced at a chance meeting with mutual friends. They married four months later in 1956. While in Chicago, Jerry continued his research in the development of contact lenses and was granted a U.S. patent in 1959. Subsequently, they moved to Southern California and opened the Security Contact Lens laboratory in Beverly Hills. When their children were older, Marie joined Jerry in the business.

When you first meet them, you are instantly struck with their loving and respectful relationship. Jerry said, “After 52 blessed years of marriage, two beautiful daughters, and working side-by-side for 37 years, we are still very much in love.”

Out one night with his wife, Jerry noticed his vision in his right eye was deteriorating. He first thought his glasses needed cleaning, but when he returned home, he knew something was seriously wrong with his vision. Diagnosed with age-related macular degeneration (AMD), Jerry was quickly referred for treatment to **Steven D. Schwartz, MD**, Ahmanson Professor of Ophthalmology and Chief of the Retina Division at the Jules Stein Eye Institute. Jerry received emergency surgery and gained peripheral vision, thanks to Dr. Schwartz’s expertise.

Sadly, Jerry is not alone in this struggle with AMD, as it is the leading cause of vision loss in Americans 60 years of age and older. This devastating degenerative eye disease gradually destroys sharp, central vision, which is needed for seeing objects clearly and for common daily tasks such as reading and driving. The Hornsteins were pleased with the care and attention they received from Dr. Schwartz and his staff. Jerry noted, “Dr. Schwartz was very capable, very professional and very human. I was terrified I was going blind, and at this time, you need more than just a doctor, you need the human side, and this is what he showed us.”

When the Hornsteins learned of the pioneering AMD research underway at the Jules Stein Eye Institute, they were inspired to make a contribution to advance these investigations. In December 2007, with a \$100,000 donation, they established the Marie and Jerry Hornstein Family Endowed Macular Degeneration Research Fund. This valuable resource will provide funds in perpetuity to underwrite Dr. Schwartz’s AMD studies and will serve as a lasting legacy to the Hornstein family. An endowment appealed to the couple because they wanted a permanent tribute to their family, particularly those who perished in the concentration camps.

Marie felt Jerry’s vision problems were ironic, because as a manufacturer and distributor of contact lenses, he had dedicated his life to improving the vision of others. “Jerry appreciated the gift of sight, and then all of sudden he could not see. This endowment was our opportunity to do something unselfish that one day will help Jerry and thousands of other people.”

In addition to this generous contribution, Jerry is also giving his time to the Institute by participating in an innovative clinical trial that explores the effects of vitamin supplementation as treatment for AMD. Now through their philanthropy, volunteerism, as well as their careers, Marie and Jerry Hornstein continue their commitment to improving people’s vision.

Debora B. Farber, PhD, DPhhc Karl Kirchgessner Professor of Ophthalmology

Debora B. Farber, PhD, DPhhc, traveled a long way to become a leading scientist at the Jules Stein Eye Institute (JSEI). She was born and educated in Argentina, where she received a PhD in Organic Chemistry. After postdoctoral studies at UC Santa Barbara she began her career in retina research as a UCLA employee, becoming full professor at JSEI in 1984. Looking at her office wall covered with awards and honors she has received for her work on the characterization of genes involved in retinal degenerations, one can appreciate her stature as a vision scientist. One is equally impressed by the number of family photos that adorn the wall—photos of Sergio, her husband of 47 years, and her children Laura, Ron and Ryan and their families, including her two grandchildren Christopher and Jessica.

We asked Dr. Farber about her work as a vision scientist, and how she manages to balance that with her family life.

What attracted you to the study of retinal degenerative diseases?

I’ve always liked to understand why and how something happens. This quest for understanding applies to both my professional and personal life. When I started working and meeting people who have retinal degeneration and diseases of the eye that lead to blindness, I decided that this was what I was going to do with my life—I would look for a treatment or prevention for these devastating diseases.

What do you consider to be your most important professional contribution to date?

Probably the most important contribution was the discovery that the β -PDE gene is responsible for retinal degeneration in the rd mouse, an animal model for autosomal recessive retinitis pigmentosa. We published our findings in 1989. My research group has discovered several genes since, but that rd mouse model is still the most studied model for retinal degeneration.

What would you still like to achieve professionally?

A couple of years ago, my research group started looking at stem cells—a very young field, but one with great potential for preventing retinal degenerative diseases. So far, we have discovered that stem cells secrete microvesicles, which have components that may be involved in cell-to-cell communication. Just imagine microvesicles docking on the membranes of other cells and transferring their content, and those cells then releasing microvesicles that dock and transfer their content to other cells, and so on. This process of communication is something that I want to explore further. It could have great promise for managing blinding diseases!

How do you like to spend your time when you’re not working?

I cook and love classical music, art and tai chi but, most of all, I love to spend time with my family. We’re very close and enjoy being together. Our children come to the house for dinner most weekends, the grandchildren oftentimes arriving with small suitcases. They love to come for sleepovers and Sergio and I love spoiling them as much as we can.



Dr. Debora Farber with her grandchildren Christopher and Jessica

New Chair Appointments

Karen and Frank Dabby Chair in Ophthalmology

Robert A. Goldberg, MD, FACS, Chief of the Orbital and Ophthalmic Plastic Surgery Division at the Jules Stein Eye Institute (JSEI), has been appointed to the Karen and Frank Dabby Chair in Ophthalmology.

Dr. Goldberg received his medical degree from UCLA and completed his residency and fellowship training at JSEI before joining the faculty in 1989. Dr. Goldberg remains committed to education and is heavily involved in the academic administration of clinical teaching programs, including directing a renowned fellowship program in orbital facial surgery and serving as Chairman of the Ophthalmology Residency Selection Committee.

He has published more than 240 articles and chapters, with research interests in Graves' orbitopathy, orbital lacrimal and eyelid surgery, and orbital tumors and reconstruction. He serves on the editorial boards of several prestigious ophthalmic plastic surgery journals, as well as the American Academy of Ophthalmology Ophthalmic News and Education network. In addition, Dr. Goldberg serves on the executive boards of the American Society of Ophthalmic Plastic and Reconstruction Surgery and the California Association of Ophthalmology.

His surgical contributions include small-incision lateral orbital decompression, minimally invasive orbital tumor surgery, the Goldberg lacrimal stent and non-incisional eyelid reconstruction techniques. In his clinical practice with patients from across the United States and around the globe, he specializes in aesthetic and reconstructive orbital surgery, endonasal lacrimal surgery, endoscopic and small-incision facial surgery, and primary and secondary blepharoplasty.

This endowment was made possible by a generous contribution from **Karen and Frank Dabby**.

Brindell and Milton Gottlieb Chair in Pediatric Ophthalmology

The Jules Stein Eye Institute is pleased to announce the appointment of **Arthur L. Rosenbaum, MD**, Chief of the Pediatric Ophthalmology and Strabismus Division, to the Brindell and Milton Gottlieb Chair in Pediatric Ophthalmology.

Dr. Rosenbaum has been on the UCLA faculty for 35 years and has served as Division Chief since 1980. He is one of the original investigators in the area of botulinum toxin injection of extraocular muscles in the treatment of strabismus and facial spastic disorder. He continues to be involved in research projects utilizing this treatment, following surgical over-correction and under-correction in an attempt to avoid re-operation and for sixth-nerve palsy. At present, Dr. Rosenbaum is working on new surgical approaches to complicated strabismus problems resulting from trauma and congenital conditions, where



From left, Dr. Barty Mondino, Karen and Frank Dabby, and Dr. Robert Goldberg at a recent dinner in JSEI's Adam Room to celebrate Dr. Goldberg's appointment to the Dabby Chair.

most of the ocular muscles are not functioning correctly. He recently completed studies on strabismus complications following cosmetic blepharoplasty and on the use of adjustable suture strabismus surgery in children.

To date, Dr. Rosenbaum has more than 200 publications and co-authored a major textbook on strabismus. He is the recipient of several outstanding awards, including Lifetime Achievement from the American Academy of Ophthalmology and the Marshall M. Parks Medal from the Children's Eye Foundation.

His clinical practice is well-known internationally. In addition to his research and patient care responsibilities, Dr. Rosenbaum is an exceptional teacher and mentor and works tirelessly to advance the field of pediatric ophthalmology and strabismus.

Shortly before his passing in February 2006, **Milton Gottlieb** and his wife **Brindell** established the Brindell and Milton Gottlieb Chair in Pediatric Ophthalmology with a \$1-million pledge. This endowment will support the teaching and research activities of the Chief of the Pediatric Ophthalmology and Strabismus Division.

Dr. Arthur Rosenbaum and his wife Sandra were the inspiration for the Gottlieb pledge. As a further testament to their admiration for Dr. Rosenbaum, the couple requested that after his retirement from UCLA, the name of the chair be changed to Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology.

JSEI is indebted to these generous donors for their dedication to advancing the goal of a lifetime of good eyesight for everyone. For more information on endowments to benefit vision research, education and patient care, please contact the JSEI Development Office at (310) 206-6035.

JSEI Named a Top Contributor of Landmark Articles

In a screening of ophthalmology journals, articles authored by the Jules Stein Eye Institute faculty were identified as "citation classics"—landmark articles that have inspired clinical and basic research in ophthalmology in the past 30 years. The study, published in the July 2007 issue of *Archives of Ophthalmology*, focused on articles that were published in major ophthalmology journals from 1975–2006.

The study authors state that the number of times an article is cited is widely believed to reflect its effect and the quality of contribution by its authors. "The number of citations an article receives after its publication reflects its effect on the scientific community. Publications in major journals and citations by other researchers are considered when decisions are made about grants, hiring, promotion and tenure. Analysis of the most frequently cited articles may reveal the effect of works of colleagues and predecessors and provide a historical perspective on the scientific progress in the field of specialty." (OhbaN, Nakao K, Isashiki Y, Ohba A. The 100 Most frequently Cited Articles in Ophthalmology Journals. *Arch Ophthalmol*. 2007;125(7):952-60.)

The 100 most-cited articles were published in 13 journals, originated from 10 countries, led by the United States, and were contributed by 41 institutions. They covered a broad spectrum of topics including epidemiology of age-related macular degeneration and glaucoma, description of new diseases including cytomegalovirus retinitis, optical coherence tomography, hypotensive medications in glaucoma, laser photocoagulation to treat diabetic retinopathy and subfoveal choroidal neovascularization, photorefractive surgery, and vitrectomy to treat idiopathic macular hole.

The Jules Stein Eye Institution was ranked among the top five leading institutions, contributing the following five landmark articles:

Young RW. Visual cells and concept of renewal. *Invest Ophthalmol* 1976;15:700–25.

Holland GN, Prepose JS, Pettit TH, Gottlieb MS, Yee RD, Foos RY. Acquired immune deficiency syndrome: ocular manifestations. *Ophthalmology* 1983;90(8):859–73.

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Young RW. Pathophysiology of age-related macular degeneration. *Surv Ophthalmol* 1987;31(5):291–306.

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Dr. Arthur Rosenbaum, holder of the Brindell and Milton Gottlieb Chair in Pediatric Ophthalmology, with a young patient

Residency Match

The process of selecting Ophthalmology residents takes place in the fall of each year for residents who will be entering the Ophthalmology program a year and a half later. The four-month process includes the review of over 300 applications, the selection of about 60 applicants to be interviewed, and a final meeting where the applicants are ranked in order of preference. This rank order list is submitted to the nationwide Ophthalmology Match Program where it is compared to the participating medical students' preferences. When both the student and ophthalmology program rank each other at the same level, a "match" has occurred and a new resident is then contracted to join the program.

In late January of last year, Residency Selection Chairman **Robert Alan Goldberg, MD**, was informed of the results of the ophthalmology residency "match" for 2008. The following applicants, selected over a year ago, will serve as Jules Stein Eye Institute House Officers beginning July 1, 2008:

Vicky Pai, MD
University of California, Los Angeles
Los Angeles, CA

Amelia Chen Sheh, MD
University of California, San Diego
San Diego, CA

Darin Goldman, MD
University of Florida
Gainesville, Florida

Jennifer Huang, MD
University of California, Los Angeles
Los Angeles, CA

Roger Duncan Johnson, MD
The Ohio State University
Columbus, OH

Annie Lim, MD
University of California, San Francisco
San Francisco, CA

Louis Savar, MD
University of California, San Francisco
San Francisco, CA

Nathaniel Roybal, MD, PhD
University of New Mexico
Albuquerque, NM

Faculty Awards and Honors

Professor of Clinical Ophthalmology and Director of UCLA's Residency Training Program **Anthony C. Arnold, MD**, was appointed Director of the American Board of Ophthalmology, effective January 1, 2008, in recognition of his years of active participation in the organization's activities. He was also named President-Elect of the North American Neuro-Ophthalmology Society. On December 8, 2007, Dr. Arnold presented the Koplowitz Lecture, "Pathogenesis of Nonarteritic Anterior Ischemic Optic Neuropathy," at the Current Concepts of Ophthalmology Meeting, Wilmer Eye Institute, Baltimore, Maryland.

Robert Alan Goldberg, MD, Karen and Frank Dabby Professor of Ophthalmology and Chief of the Orbital and Ophthalmic Plastic Surgery Division, was the King Khaled Memorial Lecturer at KKESH Eye Hospital, Riyadh, Saudi Arabia, on March 2-5, 2008. The Lecture was entitled, "Small Incision Approaches to Orbital and Ophthalmic Plastic Surgery."

Professor of Ophthalmology **Allan E. Kreiger, MD**, was invited to give The Taylor Smith Lecture at the 36th Aspen Retinal Detachment Society Meeting, Snowmass, Colorado, on March 2-6, 2008. The Lecture was entitled, "Scleral Buckling for Retinal Detachment."

Save the Date!

Joint Symposium on Cataract and Refractive Surgery

The Jules Stein Eye Institute and American Society of Cataract and Refractive Surgery will hold a Joint Symposium on Cataract and Refractive Surgery at the Century Plaza Hotel, Los Angeles, California, on February 5-8, 2009. **David F. Chang, MD**, Clinical Professor of Ophthalmology at the University of California, San Francisco, will be the Keynote speaker.

Comprehensive Ophthalmology Review Course

The Jules Stein Eye Institute and the Doheny Eye Institute teamed up to sponsor the Third Annual Comprehensive Ophthalmology Review course on February 28-March 2, 2008. The collaborative effort to develop this intensive four-day review serving ophthalmology training programs in Southern California proved to be an overwhelming success.

The course directors, **David Sarraf, MD**, Associate Clinical Professor of Ophthalmology at the Jules Stein Eye Institute, and **John A. Irvine, MD**, Professor of Ophthalmology at the Doheny Eye Institute, organized a program concentrating on the epidemiology, clinical presentation, diagnosis and management of ophthalmological disease.

EYELINES

Clinical Eye Care Update 2008

The Jules Stein Eye Institute, the Los Angeles County Optometric Society and the Garrick Optometric Welfare Clinic presented Clinical Eye Care Update 2008, on May 4, 2008. The course directors **Steven Bae, OD**, **Jule Lamm, OD**, and **Barry A. Weissman, OD, PhD, FAAO (DiplCL)**, organized an accredited program that served a dual purpose of honoring **Lesley L. Walls, OD, MD, DOS**, President and Professor of the Southern California College of Optometry, and increasing awareness of the Optometric Clinician-Scientist Endowed Chair Campaign.

The campaign's goal is to raise \$500,000 for a term endowed chair to be held by an optometric clinician-scientist at UCLA. This endowment will provide significant resources in perpetuity to enable the optometric and ophthalmic professions to collaborate on promising and pioneering investigations to uncover new treatment options that will greatly benefit patients. To date, more than \$190,000 has been raised.

For more information about the Optometric Clinician-Scientist Endowed Chair Campaign, please contact the JSEI Development Office at (310) 206-6035.

Dr. Seongmu Lee Wins 2008 Robert E. Christensen, MD, Research Award



2008 Robert E. Christensen, MD, Research Award winner Dr. Seongmu Lee attributes "the diverse patient populations served across the hospitals, the vast variety of ophthalmic disease processes, and the opportunity to work with and learn from the leaders of the field" to making his first year at the Jules Stein Eye Institute a truly exceptional experience.

The UCLA Department of Ophthalmology is pleased to announce that first-year resident **Seongmu Lee, MD**, was awarded the 2008 Robert E. Christensen, MD, Research Award of the Department of Ophthalmology Association. The award, named in honor of the late founding Chief of the Jules Stein Eye Institute's Glaucoma Division, **Dr. Robert Christensen**, is given each year to an outstanding resident or fellow to help underwrite the winner's research expenses.

The 2008 grant (\$1,800) was awarded to fund Dr. Lee's research, "Reactivation of Stable Thyroid Associated Orbitopathy." Dr. Lee stated that "patients with thyroid eye disease suffer from significant functional and psychological problems, and the precise natural history of this disease remains to be elucidated. An improved knowledge of the course of thyroid eye disease has important clinical implications as it may dictate the timing and modality of treatment and prognosis, particularly with respect to reactivation of previously stable disease."

All current JSEI residents and fellows are eligible to apply for the annual grant. **Robert Alan Goldberg, MD**, UCLA Department of Ophthalmology Association Secretary and Treasurer noted that "the annual award, being presented for the twelfth year in a row, is made possible by funding from annual UCLA Department of Ophthalmology Association dues, generously paid by JSEI alumni and faculty."



JSEI Alumni!
Interested in becoming a member of the UCLA Department of Ophthalmology Association? If you would like additional information on how to become an Association member and participate in upcoming alumni events including the annual UCLA Department of Ophthalmology Reception at AAO on Sunday, November 9, 2008, at the Ritz Carlton, Atlanta, contact us at alumni@jsei.ucla.edu or (310) 825-4148.

Special Events

The Latest Advances in Glaucoma Research

On Tuesday, February 12, 2008, **Joseph Caprioli, MD**, David May II Professor of Ophthalmology and Chief of the Glaucoma Division, hosted a medical forum at the Jules Stein Eye Institute on the latest advances in glaucoma research. Dr. Caprioli's dedicated team, including **Anne L. Coleman, MD, PhD**, **Joanne A. Giaconi, MD**, and **Simon K. Law, MD, PharmD**, is leading the search for new approaches to this persistent and devastating disease, which is the second leading cause of blindness in the United States.

If you are interested in receiving information about this event or upcoming medical forums, please contact the JSEI Development Office at (310) 206-6035.



Dr. Joseph Caprioli presented the latest advances in glaucoma research at the Jules Stein Eye Institute's medical forum.



Director of the Jules Stein Eye Institute, Dr. Bartly Mondino, with popular theater, screen and television actor Angela Lansbury



The forum provided an opportunity for Richard Matthews (left) to chat with Paul Tasker.



Eddie Wasserman, who attended the forum, links arms with JSEI Director Emeritus Dr. Bradley Straatsma.



Longtime JSEI supporters, Louis and Evelyne Blau

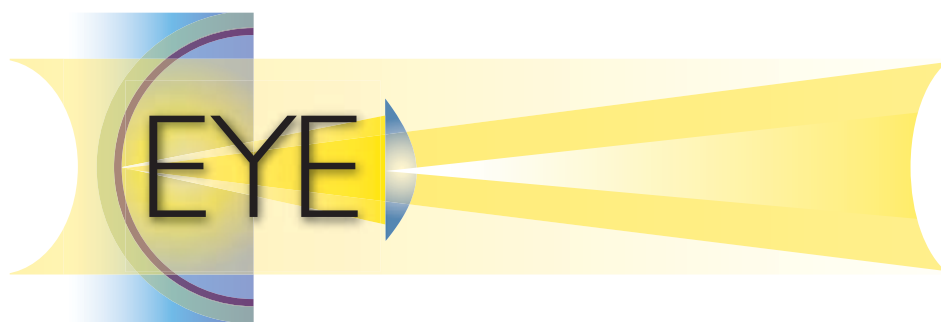
Important JSEI Phone Numbers

Patient Care

JSEI Ophthalmology Referral Service (310) 825-5000
 JSEI Ophthalmology Emergency Service (310) 825-3090
 after hours (310) 825-2111

Fund Raising

JSEI Development Office (310) 206-6035
 JSEI Affiliates (310) 825-4148



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