James Drew says he’s generally not the kind of guy who would cry in front of another guy he just met. But tears welled in his eyes within a few short minutes of meeting Saumil Merchant, M.D., at Massachusetts Eye and Eye Infirmary (MEEI) in the summer of 2002. When Dr. Merchant told Mr. Drew, “I think I know what’s wrong with you,” they were the first hopeful words this Marlboro, Mass., resident had heard in 18 months. Mr. Drew felt a rush of emotion when he realized he might finally find relief from the mysterious symptoms that were threatening his health — and his peace of mind. continues on page 4 >>>

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Immunology Doctor Saves Vision

When C. Stephen Foster, M.D., sees a new patient at Massachusetts Eye and Ear Infirmary (MEEI), he knows he may be called upon not only to preserve vision, but also to save a life.

Dr. Foster specializes in treating inflammation of the eye, a condition that has a wide range of causes, including allergies, infections and the most commonly identified cause in developed countries — autoimmune disease. Autoimmune disease occurs when the body’s own immune system, which usually fights viruses and other invaders, mistakenly attacks the body’s own cells and tissues.

Inflammation of the eye may be the first sign of autoimmunity, but it signals problems occurring throughout the body that are likely to escalate, even become life-threatening. So complex treatment is required, not only for the eyes, but for the entire body. continues on page 10 >>>

Dohlman Lauded

A founding father of the ophthalmology subspecialty of cornea, Claes Dohlman, M.D., Ph.D., is also known as a gentle, modest, persistent, patient and sometimes stubborn individual. Those closest to him would agree completely.

“Claes Dohlman is extremely stubborn,” says C. Stephen Foster, M.D., Director of the Immunology and Uveitis Service. “And because of his stubbornness and persistence, he was able to transform the Massachusetts Eye and Ear Infirmary and the Cornea department into the well-respected and highly regarded service it is today. I remember scrubbing in for a surgery one day as my two-year fellowship was ending,” recalls Dr. Foster. continues on page 2 >>>
Dr. Dohlman asked me what I was going to do next, and I told him I was interviewing at other institutions. He said, ‘Why, when you can stay here?’ It took all that I had in me to not faint with excitement.”

A native of Sweden, Dr. Dohlman began his life-long commitment to research and patient care at the Infirmary in 1958. He established the Infirmary’s world-renowned Cornea Service in 1964 and served as director of the service until 1974, when he was named Chief of Ophthalmology. During that time Dr. Dohlman began what would become his mission: his work on the keratoprosthesis project and teaching his students about such methods of treatment for patients who have no other hope for recovering sight.

“If you were to look at Dr. Dohlman’s C.V., you might think that during the time he was chairman he didn’t focus on research. On the contrary, he was just as involved in cornea research, but he didn’t take the credit for it. He was instrumental in contributing to many published papers during those 15 years, but he was more concerned with helping his students succeed than taking credit for it,” says Dimitri Azar, M.D., Director of Cornea and Refractive Surgery.

Since 1965, Dr. Dohlman has worked on numerous designs of the keratoprosthesis — a tiny plastic, button-like prosthetic “window” used to restore vision to patients with severely damaged corneas. Although the concept of this prosthetic was first conceived more than two centuries ago, the success rate for such treatment was disappointing. Since the mid-sixties, more than 200 keratoprosthesis procedures have been performed at the Infirmary and the results have become increasingly better.

“The past 10 years have proven that the prosthesis is changing the way we look at treatment methods for those who have such severe cornea damage,” Dr. Dohlman says. “This is a team effort together with my colleagues at the Infirmary.”

In addition to the commitment that Dr. Dohlman has devoted to research, he is equally dedicated to teaching those that will eventually carry on his work. In 1960, Dr. Dohlman began the first cornea fellowship program in the world. The fellowship was a sharply focused program for training research and clinical students interested in sub-specializing in the cornea. Dr. Dohlman was also instrumental in helping set up the first formal cornea fellowship program in Europe.

Since the inception of the fellowship program, the Cornea Service has trained at least 200 clinical fellows, more than 50 of whom have become full professors of ophthalmology. Even more impressive, more than 30 have gone on to become chairmen of ophthalmology in academic medical centers throughout the country and around the world.
"I am so amazed by this man," says Dr. Azar. "He published more than 200 papers prior to becoming chairman and then after his 'retirement' went on to publish more than 50 additional papers, all the while continuing teaching and caring for patients."

Dr. Dohlman's influence isn't limited to his colleagues in North America. He has traveled the globe, teaching doctors in such places as Brazil, Japan, Sweden, Spain, Greece, and just recently India, where he lectured and instructed another group of eager cornea surgeons. In order to educate physicians on the keratoprosthesis technique and to prove the efficacy of implanting it, Dr. Dohlman is currently involved in launching a multi-center trial that will involve more than 30 institutions nationwide, approximately 40 cornea surgeons and more than 400 patients. In 2000, the Claes Dohlman Society Award was established by Dr. Dimitri Azar to recognize outstanding fellows training in the area of Cornea, Refractive Surgery and External diseases. The award is available to any fellow training in these areas of Ophthalmology who is currently in a cornea fellowship.

In September 2002, Drs. Foster and Azar convened a seminar at the Infirmary to honor Dr. Dohlman and the numerous contributions he has made to the cornea field. Many former students and colleagues attended the seminar to show their respect, admiration and love for the man who has given them so much. In addition to the seminar, Drs. Foster and Azar compiled an album of heartfelt thank you letters from Dr. Dohlman's students which was presented to him at his 80th birthday celebration.

If teaching and research weren't enough of an achievement, Dr. Dohlman and his wife, Carin, have raised six children, two of whom have become physicians and four of whom have received their doctorates. They are also blessed with 12 active grandchildren. Every summer the entire Dohlman clan gathers at the family farm in Sweden for a reunion.

“He is the consummate physician, surgeon, teacher, mentor, husband, father and grandfather,” says Dr. Azar. “This gentle person has helped so many people already. His giving is endless.”

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After years of dealing with numerous doctors who were unable to diagnosis the cause of his blindness, John Hohmann was referred to Massachusetts Eye and Ear Infirmary cornea specialist, Claes Dohlman, M.D. Ph.D. That was more than 30 years ago. Today, Mr. Hohmann has 20/20 vision in his left eye (he is legally blind in his other eye).

Mr. Hohmann was first diagnosed by Dr. Dohlman in 1970 with an inherited form of corneal disease. Lattice corneal dystrophy is a condition in which the cornea produces abnormal protein that obscures vision.

Mr. Hohmann underwent many surgeries over the next 20 years. He received four corneal transplants that were initially successful, but due to his disease and the constant recurrence of infection, the transplants would eventually deteriorate and leave him, literally, in the dark.

“Dr. Dohlman never gave up,” recalls Mr. Hohmann. “Every time I would come back to him, he would say ‘Let’s see what I can do for you’ and he would suggest another method of treatment.”

Mr. Hohmann received his break in 1993 when Dr. Dohlman suggested a prosthetic device, called a keratoprosthesis, for his left eye.

“When I heard what Dr. Dohlman was going to do, I was skeptical, but I was also desperate,” Mr. Hohmann says. “I was willing to try anything, and I am glad I did.”

A keratoprosthesis is a tiny plastic “window” used to restore vision for patients with severely damaged corneas. For the past nine years, Mr. Hohmann has been able to live the life he cherished prior to his blindness.

Mr. Hohmann is able to drive his car and remain independent, something, he says, he never dared to hope for prior to meeting Dr. Dohlman.

“It has been a long battle,” Mr. Hohmann says. “Dr. Dohlman has done more for me than I ever imagined. He has stuck with me for so many years. For that I will forever be grateful.”
Mr. Drew’s problems began in early 2001 when loud noises began to cause what he describes as “twists” in his vision that felt similar to dizziness. It would also occur when he concentrated his vision on an object close to his eyes or lifted a heavy object. The irony was that Mr. Drew worked in an auto body shop where a tolerance for loud noise and a focused eye were critical to success.

The effects of the symptoms went well beyond work. Singing in church or calling to his wife, Cheryl, could also bring on Mr. Drew’s symptoms. “I felt sluggish. It was hard to work. And I was grouchy at work and at home,” he recalls.

Mr. Drew visited many specialists over the months. Although Mr. Drew’s symptoms pointed to a problem in the left ear, traditional tests of hearing and balance did not turn up any abnormalities. On the advice of a family friend, Mr. Drew made an appointment with Dr. Merchant, Co-Director of the Wallace Middle Ear Clinical Research Unit at Massachusetts Eye and Ear Infirmary and an Associate Professor of Otology and Laryngology at Harvard Medical School.

Dr. Merchant suspected that Mr. Drew’s problem may be a rare condition affecting the inner ear, termed superior semicircular canal dehiscence (SSCD). He arranged for Mr. Drew to have a battery of specialized tests, which indeed pointed to a diagnosis of SSCD. The final piece of information came thanks to MEEI radiologist, Hugh Curtin, M.D., and state-of-the-art CT scan equipment in Dr. Curtin’s department. Scans confirmed the diagnosis of SSCD, which is an uncommon condition characterized by loss of bone covering one of the balance organs within the inner ear, namely, the superior semicircular canal. This tiny abnormal opening (the dehiscence) permits abnormal movement of fluid within the semi-

As with many advances in medicine, problems seen in the clinic is one of the driving forces behind the work of the Wallace Middle Ear Research Unit within the Eaton-Peabody Laboratory at MEEI. Saumil Merchant, M.D., Co-Director of the Unit, explains that great strides have been made over the years in surgical techniques to treat chronic infections affecting the eardrum and the middle ear. More than 70,000 of these procedures are done each year in the United States.

“We are very successful at getting rid of middle ear infections and repairing the eardrum, but the hearing loss is not improved in about half of the cases,” Dr. Merchant explains. “While there are many reasons for the persistence of conductive hearing loss after surgery for chronic middle ear disease, one of the problems is that we do not fully understand the micromechanics of middle ear function well enough to accurately fix problems.”

Since 1986, Dr. Merchant has dedicated himself to gaining that understanding. Working with John Rosowski, Ph.D., Co-Director of the Unit and senior scientist, William Peake, Sc.D., as well as with many predoctoral and postdoctoral students, Dr. Merchant is part of a team studying the structure and function of the middle ear and how disease affects function and hearing. The goal is to improve the diagnosis and treatment of conductive hearing problems and to improve surgical outcome.

The Unit’s “bench” research efforts include both theoretical (mathematical) models of hearing and direct measurement of movements of the eardrum and middle ear structures in animal and human tissue models. This research has led to new diagnostic tools with clinical applications for patients like James Drew, who benefited from a new technology called laser Doppler vibrometry (DVD). (See related article about Mr. Drew). Purchase of the equipment was made possible through the generosity of the Wallace Family, for whom the Unit is named.

Lasers have long been used in the automotive and other industries to measure vibrations in engines and other equipment. It has also been used for many years in basic science research concerning the ear. Dr. Rosowski and Dr. Merchant have refined this technology to allow its innovative use in a clinical setting. “By attaching a laser to a standard ear microscope, we are able to bounce laser light off the eardrum and to measure the velocity of eardrum movement in real time as the ear reacts to sound,” says Dr. Merchant. “The test is painless and completed in less than 10 minutes.”

If the eardrum is intact and there is a conductive hearing loss, there is usually a problem with one of the three bones of the middle ear. But, what is the problem? Has one of the bones become stiffened or have the bones become detached from each other? And, which bone of the three is affected? The LDV test can answer these questions and thus provide surgeons with knowledge of what to expect within the middle ear when the surgery is performed.

“The LDV test is also helping us to better understand how superior semicircular canal dehiscence can result in an apparent conductive hearing loss in some cases,” says Dr. Merchant. “The generosity of Monte and Anne Wallace and of other infirmary donors has led to exciting developments that translate into better care for our patients.”
Providing outstanding clinical care and patient service has long been at the heart of Massachusetts Eye and Ear Infirmary’s mission. Consistent with that, the Infirmary appropriately safeguards patient information to preserve confidentiality.

Last year Congress adopted a new set of standards giving patients even greater control over how their medical information is used and disclosed, and creating a single national standard for patient privacy. What this means for you is that the next time you visit the Infirmary (or any other hospital or physician office) as a patient you will receive a “Notice of Privacy Practices” to review and acknowledge. This notice will describe the various uses of your protected health information, i.e. for treatment, payment or health care operations. It will also provide you with an opportunity to have your name removed from lists used to generate fundraising communications.

Development staff will continue to provide detailed information regarding research in specific diseases to donors who have supported that research in the past. If you haven’t supported research relating to a specific disease, but would like to learn about those initiatives, you will be asked to sign an Authorization Form enabling us to send that communication.

For more information, please call the Development Office at (617) 573-3342.

SSCD was identified a mere five years ago. At the time of Mr. Drew’s testing, only a handful of surgeries to correct the problem had been performed, most of them by MEEI neurotologist, Michael McKenna, M.D. Dr. McKenna stepped in for Mr. Drew’s surgery, repairing the defect in the bone at the top of the superior semicircular canal. Success was immediately evident as Mr. Drew recovered from surgery in MEEI’s Intermediate Medical Care Unit, a few short hours after his surgery. Mr. Drew asked for a glass of water, and when he held it close to his eyes, his vision remained constant. His vision, balance and life have all returned to normal.

“I feel like myself again” says Mr. Drew, “and I have Dr. Merchant, Dr. McKenna, and the fantastic staff at MEEI to thank for it.”

MEEI DISCIPLINES CONVERGE

“While the dizziness and imbalance caused by SSCD has gathered a lot of attention,” says Dr. Merchant, “we have also discovered, in recent years, that SSCD can sometimes lead to a significant hearing loss and other auditory symptoms. What makes this very interesting is that the hearing loss is of a ‘conductive’ type, one that ordinarily results from a problem within the middle ear. We are trying to understand how SSCD, which is a problem in the inner ear, results in a hearing loss that mimics the hearing loss from problems within the middle ear.”

Many different disciplines at MEEI are working together to better understand the balance and hearing disorders caused by SSCD. This effort includes MEEI otologists and neurotologists, basic scientists within the Wallace Middle Ear Clinical Research Unit, as well as clinicians and researchers in Audiology, Radiology and the Vestibular Laboratory. By working together in the laboratory and in the clinic, Infirmary clinicians and scientists have developed a battery of specialized tests that are particularly useful in the diagnosis of SSCD, as was the case with Mr. Drew. Many of these tests are based on cutting-edge technology and research underway at the Infirmary, such as the specialized CT scan in Radiology, the VEMP test in Audiology, and the laser Doppler vibrometry (LDV) test in the Wallace Research Unit (see accompanying story).

“One of the unique strengths of this organization,” says Dr. Merchant, “is the collaboration between basic science researchers and clinicians working together to improve the frontiers of diagnosis and therapy for disorders affecting the ear, nose, throat and the eye.”
As a bright and energetic girl of 14, Phebe Tonseth began what was to become a rare and treasured friendship with Elliot P. Joslin, M.D., founder of the Joslin Diabetes Center. Mrs. Tonseth learned that she suffered from type 1 diabetes, and Dr. Joslin stressed the importance of making a life-long commitment to nutrition and healthy living. “Dr. Joslin told me that I could live a long and happy life if I made taking care of myself my top priority,” she said. And she did so! With her husband, Didrick, a decorated World War II hero, she raised twins, was a career children’s librarian and an active volunteer and civic leader.

The teenage Phebe Tonseth quickly learned of Dr. Joslin’s achievement program that awards diabetics medals for surpassing key milestones of good health. She set her sights on the 25-year medal and proudly received one. Today, Mrs. Tonseth plans to be one of only a handful of diabetics to have ever received the 75-year Joslin medal of good health, an extraordinary accomplishment by any standard.

Last summer, in celebration of her 85th birthday, Mrs. Tonseth’s family surprised her with a special gift. The Tonseth-Joslin Fellowship was established at the Massachusetts Eye and Ear Infirmary (MEEI) as an endowment that will provide enduring support for young physicians studying diabetic retinopathy and macular degeneration, the two leading causes of adult-onset blindness.

Mrs. Tonseth’s daughter, Widgie Aldrich, said, “We wanted to give my mother something that would forever pay tribute to the friendship she shared with Dr. Joslin, while also making important contributions to the fight to prevent blindness in diabetics and the elderly.”

“Gifts such as this one are true investments in medicine,” said Evangelos Gragoudas, M.D., Acting Chief of Ophthalmology and Director of the MEEI Retina Service. “The Tonseth-Joslin Fellowship will enable an unbroken succession of young physicians to pursue new and innovative approaches to retinal problems. As a result of this experience, many of them will choose careers in academic medicine, ultimately leading to sight saving advances.”

To mark this occasion, a reception was held last October at the Infirmary to celebrate Mrs. Tonseth’s birthday. Her children and grandchildren gathered with Infirmary physicians to unveil a plaque mounted in the Infirmary’s 12th floor patient waiting room, where patients with diabetic retinopathy receive treatment.

“Diabetes is a demanding disease, but I am living proof that one can lead a fulfilling life even with the challenges that diabetes poses. I hope others will be encouraged to apply the same perseverance and diligence that I do to maintaining good health,” said Mrs. Tonseth.
Infirmary Welcomes New Board Members

The Massachusetts Eye and Ear Infirmary welcomed four individuals to three-year terms as members of the Board of Directors at the Annual Meeting in December. Although new to the Board of Directors, they are not new to the Infirmary.

**Peter C. Aldrich** has been a trustee since 1999. He is a pioneer in the design of alternative equity and debt financing techniques for real estate. A graduate of Harvard College and Harvard Business School, he has taught at Harvard’s and Yale’s business schools. He is a Director of the National Bureau of Economic Research, Governor of the Jerome Levy Economics Institute, an Overseer of the Museum of Fine Arts and a past trustee of Phillips Exeter, Simon’s Rock of Bard College, and the Shady Hill School. He is a member of the Harvard Committee on University Resources. Mr. Aldrich serves on the Infirmary’s Building and Real Estate Committee.

**Richard H. Aldrich** became a trustee in 2001. He co-founded Vertex Pharmaceuticals, and served as its Chief Business Officer for a decade, handling strategic alliances, mergers and acquisitions, among other responsibilities. Currently a venture capitalist and business advisor to Vertex, he is a graduate of Boston College and the Tuck School of Business at Dartmouth. He serves on the board of the Boston YMCA. He has consulted to the Infirmary’s Business Development efforts and spearheads Pediatric fundraising initiatives at the Infirmary.

**John E. Kavanagh III** has been a trustee since 2000. He is Chairman of William A. Berry & Son, a $213 million international construction management and general contracting firm, one of the largest in Massachusetts. Berry & Son has specialized expertise in healthcare construction. He serves as chairman of the North Shore Music Theatre, whose capital campaign he also chairs. He is an Overseer of Brigham & Women’s Hospital. He is a graduate of the Tufts College of Engineering. Kavanagh is an active member of the Building and Real Estate and Development Committees.

**Frederick G.P. Thorne** has been a trustee since 1973. He recently sold his investment company, Harbor Capital Management, which he founded in 1979. Currently he is consulting to the new owners of Harbor and to a New York hedge fund. Thorne is a graduate of Bowdoin College, of which he was Chairman of the Board until recently; he also chaired Bowdoin’s $130 million capital campaign. Currently, he serves on the Bowdoin Board and on the Board of Northeast Health Systems. He serves as Chairman of MEEI’s Investment Committee and as the new Chairman of the Development Committee.

Richard Baldwin, Right Eminent Grand Generalissimo of the Knights Templar Eye Foundation, Inc., (right), presented Infirmary researcher Maxim Sokolov, Ph.D., (left), with a $30,000 grant for his work, as Infirmary President F. Curtis Smith, (center), looks on. The grant was given in support of Dr. Sokolov’s basic eye research. The presentation was made last Fall. The Knights Templar Eye Foundation, Inc., has been a generous supporter of the Infirmary’s eye research programs.
The 17th Annual Reynolds Society Dinner and Achievement Awards will be held on Friday, Nov. 7, at the Fairmont Copley Plaza in Boston. Named for Edward Reynolds, M.D., co-founder of the Infirmary, the Reynolds Society honors friends who contribute $2,000 or more to the Infirmary in a given fiscal year (Oct. 1 to Sept. 30). The evening will be filled with noteworthy and inspirational speakers and awardees. For more information about joining the Reynolds Society, contact Melissa Paul at 617-573-4168. The photographs on these pages were taken at last year’s dinner.
A gentle, warm breeze rippled the palms at the lovely contemporary home of Diego and Gisela Lowenstein in Coral Gables, Florida, on Feb. 27, as the Lowensteins hosted a reception and silent art auction to benefit Ron Eavey, M.D., Director of Pediatric Otolaryngology at the Infirmary. The silent auction featured original paintings and sculpture by modern artists like Matta, Miro, Paez and Wolski. The art was offered by Diana Lowenstein Fine Arts at a significant discount; bids above the discounted price became gifts to the Massachusetts Eye and Ear Infirmary to help establish a fellowship in Pediatric Otolaryngology. Proceeds from the auction, plus generous gifts from the Lowensteins and their friends, generated more than $18,000 for this special purpose.

Dr. Eavey had successfully treated the Lowensteins’ son, Lucas, for a cholesteatoma, and the reception and auction were one way that the Lowensteins showed their appreciation to Dr. Eavey. Cholesteatoma is a serious condition in which skin grows behind the middle ear, creating the risk of hearing loss, among other problems.

“Dr. Eavey is a wonderful person and an expert doctor, like no other in his field,” Gisela Lowenstein said. “He saw Lucas promptly and provided him not only with skillful treatment, but also with a huge dose of genuine care — a personable and human side of healthcare rarely seen in other professionals. We are very grateful to Ron. Now Lucas can enjoy being a 4 year old again.”

“I am very grateful to Diego, Gisela and Diana Lowenstein for their hospitality and generosity in hosting this magnificent event,” Dr. Eavey said. “Through their wonderful efforts, we hope to be able to accomplish more for wonderful kids with ear problems, like Lucas,” Dr. Eavey said.
As Director of the Ocular Immunology and Uveitis Service at the Infirmary, Dr. Foster and his team of physicians, fellows, optical technicians and support staff provide care through approximately 6,000 patients visits a year. Most, if not all, of these visits are by patients with inflammation of the eye: conjunctivitis, keratitis, scleritis, retinitis or uveitis.

Uveitis is the term for inflammation inside the eye that affects the three parts of the eye that make up the uvea:
- **The iris** – the colored part of the eye;
- **The ciliary body** – behind the iris, responsible for manufacturing the fluid inside the eye; and
- **The choroid** – the vascular lining underneath the retina.

Uveitis is the third leading cause of blindness in the United States, after diabetes and macular degeneration. Worldwide, inflammation is actually the number one cause of permanent damage to the eye and loss of sight, due mostly to infections such as trachoma and river blindness in developing countries. With such infections largely under control in the United States, autoimmunity is the greatest challenge.

Dr. Foster’s clinical service treats adults and children based on the philosophy of “doing whatever it takes” to accurately diagnose and successfully treat them. This “never give up” attitude is greatly appreciated by families, like the Leins of North Dakota, who are facing perplexing and frightening diseases (related story page 11).

Through the clinical service, patients receive one or more treatments, including oral or injected steroids or other anti-inflammatory medications, chemotherapy and surgery. Dr. Foster and his colleagues are respected world-wide for clinical research that has resulted in revolutionary treatment regimens for patients with particularly complex disease, including new genetically based treatments aimed at blocking or stimulating malfunctioning aspects of the immune system.

“As a physician in this field, first you have to have a love for the diagnostic hunt, because the cause of uveitis is rarely apparent,” says Dr. Foster. “Then you have to be committed to applying different combinations of treatments, and dealing with recurrences and shifts in treatment. Many patients require years of treatment. Despite the challenges, it is very gratifying to help people who may not be able to find this level of treatment anywhere else.”

**EXTRAORDINARY PHYSICIANS/PIONEERING RESEARCH**

It takes an extraordinary specialist to take on such diseases, says Dr. Foster, one who is willing to make decisions about precise treatments with potentially harmful side effects, such as chemotherapy agents. Dr. Foster himself is dually trained...
and is a Fellow of the American College of Rheumatology, a specialty that encompasses many autoimmune diseases. He is also board certified in ophthalmology and is a fellow of the American Academy of Ophthalmology.

Because developing such specialists is critical to making progress against uveitis and other ocular inflammatory diseases, education and training is a central part of Dr. Foster’s mission. He has provided post-graduate training through his prestigious fellowship program for more than 20 years. He also lectures nationally and internationally, and in 2001 published a text on uveitis that has become the best-selling book for clinicians on the topic.

Fellows complete both clinical and laboratory-based research projects, reflecting the broad range of research occurring under Dr. Foster’s directorship of the Hilles Immunology Laboratory and the Rhoads Molecular Immunology Laboratory at MEEI. Among the current laboratory projects is research on biochemical and genetic markers in children with juvenile idiopathic arthritis (JIA), in collaboration with researchers at Massachusetts General Hospital and the University of Strasbourg in France. By studying JIA patients who do and do not develop uveitis, researchers hope to be able to identify children at high risk and to provide early treatment to prevent blindness.

Other key research projects include:
> Working with other MEEI researchers to develop a tiny, implanted device that can deliver daily medication to structures in the eye for up to a three-year period. Such a system would reduce the inconvenience, discomfort and potential for infection of other delivery systems, and increase the effectiveness of medications.

> Developing a way to deliver genetically based medications through needles under the skin, rather than directly into veins. This would allow patients to administer their own medications without the inconvenience of coming to a clinical office.

> An extended study of a daily anti-viral medication to treat eye-related symptoms of the herpes simplex virus. The study, recently completed, showed this treatment regimen to be safe, and effective for helping to prevent virus flare-ups.

Dr. Foster says he is working on plans to greatly expand both clinical and basic research projects on uveitis and autoimmunity. “Persistence and thinking outside the box are the keys to making real progress. Many others have repeatedly gotten it right through the ages; I think it was Thomas Edison who once said that 99% of all failures are the result of quitting too soon,” Dr. Foster says.

Because so many uveitis patients travel far for care, the Internet provides a vital channel of communication. Dr. Foster established a Web site that is rich with information for patients, families and clinicians looking for education and support. The site’s online support group has attracted more than 1,000 members (visit www.uveitis.org).

“Dr. Foster is the one who seems to care the most. When treatment gets tough, he reminds me that he will never give up and neither should I,” says Janine.

Working against uveitis in children is an important research and treatment goal for Dr. Foster and his team at the Ocular Immunology and Uveitis Service, and the Hilles Immunology Laboratory and Rhoads Molecular Immunology Laboratory.

“When we make progress for children, we’re not just making their lives better today,” he says, “we’re giving them another 75 years or so without the burden of loss of sight.”
Since the Gifts Plus Program was launched a year ago, it has become a popular way to support the Massachusetts Eye and Ear Infirmary. Alan Shapiro recently signed up. “Thanks to the Infirmary I’m enjoying things I never expected to do again in my life. Now it’s my turn to give something back. By choosing Gifts Plus, I can make smaller monthly gifts with automatic withdrawals from my bank account. I’m able to give more overall, and that feels great,” he said.

The Gifts Plus Program allows Infirmary friends to determine how much they want to give and how often. Gifts are transferred electronically through the nation’s Electronic Funds Transfer system (EFT) directly to the Infirmary. Gifts Plus is easy to use, convenient (eliminates the effort of check-writing, postage and mailing), safe and affordable. Gifts can be designated to a specific Infirmary physician or program, or can be unrestricted to support the needs of the hospital.

For Mr. Shapiro, the Gifts Plus Program is one way he is helping to support the research of Donald K. Eddington, Ph.D. “Several years ago I became profoundly deaf after struggling with hearing loss for most of my life. Going out with friends became increasingly difficult, and my work as a pharmacist was greatly hampered. I began to lose my zest for life,” Mr. Shapiro explained. “My future changed when Dr. Eddington determined that I would be a good candidate for a cochlear implant. A few months ago I was outfitted with the device — my life hasn’t been the same since. Using the phone and enjoying the symphony for the first time in 25 years are just two of the many reasons why I’m so grateful to Dr. Eddington.”

It is easy to sign up for Gifts Plus. Please contact the Development Office at 617-573-4312 or send your name, how much you would like to give, and the program you would like to support, along with a voided check, to Development Office, MEEI, 243 Charles Street, Boston, MA 02114.