

THE OCULAR  
IMMUNOLOGY  
AND UVEITIS  
FOUNDATION

# Ocular Immunology and Uveitis Foundation

## Massachusetts Eye Research and Surgery Institution

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Winter 2008

## Governor Deval Patrick proclaims September 2008 as "Ocular Inflammatory Disease Awareness Month" in the Commonwealth of Massachusetts

State Representative Jennifer Callahan, D-Sutton, presented a Resolution from the Massachusetts House of Representatives recognizing the awareness month to Dr. Foster and OIUF board members at a small ceremony at the State House on September 24th. Ashley Floreen, a former colleague of Representative Callahan and a patient at MERSI, played a special role in orchestrating the event. Ashley, who has suffered from scleritis for over six years, says she hopes this recognition will bring much needed attention to ocular inflammatory diseases and the Ocular Immunology and Uveitis Foundation.

"My scleritis went undiagnosed for five years. Although I grew up less than 30 miles from Boston and attended college in Massachusetts, none of the physicians I saw suggested I see a specialist and treated my flares only with steroid drops. As a result, I spent many nights studying for exams and writing my senior thesis with my hand over my eye, hoping the pain and redness would subside. When I graduated college in May 2007, I returned home and saw a fifth ophthalmologist, who recognized the severity of my condition and referred me to Dr. Foster. After years of wondering what was wrong, I could finally put a name to my disease.

Like many patients, my OID has been stubborn to control. I have had to climb high on the stepladder, trying numerous NSAIDS, immunosuppressive chemotherapy treatments, surgery, and of course the infamous steroid drops, in hopes of finding a recipe which will put me in remission. As my mother and I looked around MERSI at my first appointment and saw patients receiving intravenous infusions, we thought maybe my condition was too mild for this type of facility. Unbeknownst to us, my scleritis was stubborn enough that fifteen months after my initial appointment with Dr. Foster, I recently sat down to my first IV infusion, hoping this medication will be the one that leads me to remission.

I never imagined the road to recovery would be this long and complicated, nor did I truly understand the consequences of under-treating ocular inflammatory diseases until I became a patient at MERSI. As a result, I wanted to take an active role in advocating for patients whose vision has been affected by these orphan diseases. Because they are so rare, the public, as well as many physicians, do not understand the importance of referring patients early to preserve vision. I am extremely fortunate that I have not suffered from the effects of chronic steroid use and inflammation and my vision remains 20/20 today, thanks to an aggressive medical team at MERSI and the important research conducted through OIUF. However, many patients are not as lucky. They were not diagnosed in time to receive steroid sparing treatment and consequently have lost all or part of their vision. I hope by declaring September 2008 as Ocular Inflammatory Disease Awareness Month in Massachusetts, more attention will be paid to illnesses such as uveitis and scleritis and more states will follow suit so we can create national awareness of a disease that affects many individuals and causes far too many people to unnecessarily lose their sight."

**Ashley Floreen is now working at MERSI as the Marketing and Customer Service Associate**



Ashley Floreen on far left with OIUF Board of Directors, Alison Justus, patient Joanne Zeis and Jennifer Callahan on far right.

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## Calendar of Events

**January 13, 2009**

Support Group  
1:00-2:00pm  
Discussing Uveitis/OID and Treatment

**March 10, 2009**

Support Group  
6:30-8:30pm  
Anatomy of the Eye

**May 2009**

Fourth Annual Through Their Eyes: Auction  
Date TBA

**June 12, 2009**

Support Group  
6:30-8:30pm  
Research Updates

**July 28, 2009**

Support Group  
6:30-8:30pm  
Addressing concerns about OID/Uveitis

**September 26, 2009**

Walk for Vision

**November 14, 2009**

Fourth Annual Physician Education Conference:  
New Paradigms in the Treatment of Posterior  
Segment Disease"

Cut along the dotted line and retain for reference.



## THE OCULAR IMMUNOLOGY AND UVEITIS FOUNDATION

### Our Mission

The Ocular Immunology and Uveitis Foundation is a 501c(3), national non-profit, tax-exempt organization. Our mission is to find cures for ocular inflammatory diseases, to erase the worldwide deficit of properly trained ocular immunologists, and to provide education and emotional support for those patients afflicted with ocular inflammatory disease.

### Ways to Give

The end of the year is often a time to review financial matters and charitable commitments. To help meet your philanthropic goals, OIUF accepts gifts of many types, including appreciated securities, bequests, real estate, qualified retirement and life income gifts. Any charitable gift made prior to December 2008 may reduce 2008 income and estate taxes.

**For information on becoming a member of "The Foster Society" and to receive OIUF's new planned giving guide please contact Alison Justus at (617) 494-1431 x112 or e-mail [oiuf@uveitis.org](mailto:oiuf@uveitis.org)**

**Please use the enclosed envelope for your donation**

**Looking for a way to honor a loved one this holiday season:**

**Log on to: <http://www.firstgiving.com/uveitis> and create a fundraising web page in his or her honor.**

# Letter from Our President

2008 was an excellent year for the Ocular Immunology and Uveitis Foundation. We continue to offer the most up to date and important information regarding ocular inflammatory diseases. As you will read about in this newsletter, we have made substantial and important strides in all areas of our mission.



**C. Stephen Foster, M.D.**

In the last year our research efforts have grown immensely with the addition of new clinical studies that are directed on various conditions that afflict individuals with ocular inflammatory disease, including Macular Edema and Glaucoma. Current research projects developed through OIUF have been significantly inspired by this year's group of extraordinary fellows and trainees at MERSI who are making meaningful contributions in the field of ocular inflammatory disease, submitting abstracts to AAO (American Academy of Ophthalmology) and ARVO (Association for Research in Vision and Ophthalmology). The quality of our research has also been enhanced through the purchase of two new microscopes that you will read about on page 7.

This autumn alone, OIUF reached milestones in educating the public, the national and international medical community, and our valued patient population. September included the declaration of Ocular Inflammatory Disease Awareness Month in Massachusetts by Governor Deval Patrick, bringing much needed attention to our work. In addition to hosting our annual Physician Education Conference in October, earlier in the same month OIUF held an International Symposium on Birdshot Choriopathy for both physicians and patients affected by this condition. This represented the establishment of a new format for our educational conferences. The Foundation has also introduced a new method in the form of videoconferencing in order to offer ocular inflammatory disease education in and around the globe.

I was pleased to be given an opportunity to speak at a conference on Juvenile Idiopathic (Rheumatoid) Arthritis on September 22nd in New York City about the important work OIUF and MERSI is doing to help children and their families with early diagnoses and proper treatment of pediatric uveitis. Finally, the third all day Uveitis meeting: Uveitis Subspecialty day, which I organized along with Dr. Quan Nguyen at AAO, held on November 8th in Atlanta received a record number of attendees.

Thanks to your efforts, this year's "Walk for Vision" was the most successful to date, not only in terms of funds generated from the event, but the tremendous show of support from family and friends of individuals living with ocular inflammatory disease.

On behalf of the Board of Trustees, I thank you for your partnership and part in OIUF's accomplishments. We are excited about the benefits and positive impact our work has on your day to day lives and look to you for your continued support in moving forward with our efforts in the New Year.

## OIUF's Mission Reaches India

Dr. Foster was invited to be a featured lecturer by the Associate Director of the Prasad Eye Institute in Hyderabad, India. On November 22, 2008, Dr. Foster gave a presentation (via videoconference in Massachusetts) on Anterior Segment Ocular Inflammatory Disease to an audience of over 75 in four separate locations throughout India. Those in attendance included senior faculty and scientists, approximately 45 ophthalmic subspecialty fellows, optometry students, 30 clinical faculty, and ophthalmic nursing students. Through videoconferencing, Dr. Foster was able to present this topic live in an interactive setting. The presentation was well received and we anticipate that this is the first of many such presentations that will be given to a world-wide audience.



# Making Visible Differences

## International Symposium on Birdshot Choroidopathy

October 4, 2008

This conference dedicated solely to Birdshot Choroidopathy was held at the Broad Institute of MIT and Harvard in Cambridge, MA. Both patients and doctors were in attendance. World renowned specialists discussed topics ranging from the epidemiology and natural history of birdshot to genetics to new treatments. Patients were given the opportunity to participate in a breakout session apart from the main meeting that covered important topics such as how to reduce challenges and coping with a chronic disease. A heartfelt thanks to our generous supporters, including Jane and Michael Hoffman.



Faculty (From left:) Aniki Rothova, MD, PhD, David Hafler, MD, Janet Davis, MD, Robert Nussenblatt, MD, Dr. Foster, Paul Gaudio, MD, Phuc LeHoang, MD, Dr. Hinkle and Jennifer Thorne, MD



Aniki Rothova, MD from the Netherlands



(From left to right:) Patients Dee Rogers from Chicago, IL and Gae Palazzo from Warwick, RI



Karen Kurlander, Ph.D speaks to patients about coping with Birdshot choroidopathy

## Third Annual Physician Education Conference: New Paradigms in the Treatment of Anterior Segment Disorders

October 25th, 2008

This annual meeting was held at the Boston Marriott in Cambridge. This year's conference covered new and emerging developments in anterior segment disorders. Physicians received CME (continuing medical education) for attending the conference. OIUF would like to thank Alcon, Allergan (lead sponsors), Sirion, Bausch & Lomb, Inspire, Merrimack Pharmaceuticals, ISTA, IOP, Cerimon, Eyegate Pharma and all supporters for making both conferences possible.



Faculty (From left:) Herbert Kaufman, MD, Mark Milner, MD, Dr. Hinkle, Jeffrey Liebmann, Dr. Foster, Kenneth Kenyon, MD, Mark Terry, MD, Ioannis Glavas, MD



Dr. Hinkle and Kenneth Kenyon, MD



Physicians view presentations from colleagues



Dr. Foster speaks with colleagues

# s in Research and Beyond!



The Walk kicked off at the Royal Sonesta Hotel in Cambridge, MA and ended with a fun and educational program and a delicious lunch



(From left:) Renee Taunton and Nia Phipps brave the rain

## 2008 Walk for Vision

On Saturday September 27<sup>th</sup>, friends and family joined Dr. Foster and OIUF's Uveitis Support Group for the Fourth Annual 5k "Walk for Vision" around the Charles River.

The walk was a great success, raising over \$70,000 to be used towards our research. Thanks in no small part to Bausch and Lomb, Sirion Therapeutics and LuxBio Sciences, as well as our new online fundraising initiative.

A special thank you to our top individual fundraisers and their families; Alexis Catalono, Danielle Mannette, Nia Phipps and Olivia Eafano.



(From left:) MERSI technicians Kayleigh Fitzpatrick and Danielle Marvell with Chief Fellow (center), John Mauro, DO



Dr Foster and OIUF Boardmember, Richard Hersum



Olivia Eafano and her family



Walkers take time out for photo opportunity



Representative Callahan joined Dr. Foster, top fundraiser Alexis Catalono (cutting ribbon) and others for a ribbon cutting ceremony in honor of Ocular Inflammatory Disease Awareness Month



# Research Highlights

## **Novartis - AIN457**

A proof-of-concept study sponsored by Novartis, in which the purpose of the study is to determine the safety of AIN457 in patients with uveitis and to investigate whether an antibody like AIN457, which neutralizes the cytokine IL-17A, will safely reduce the intraocular inflammation associated with non-infectious uveitis. Site selection was competitive for the year long study and enrollment to this infusion study is now successfully completed.

## **Novartis - AEB071**

A new proof-of-concept study sponsored by Novartis, in which the purpose is to determine the safety and effectiveness of AEB071 in patients with uveitis. The study investigates whether an antibody like AEB071 that inhibits a category of enzymes called "Protein Kinase C" (PKC) can help to reduce macular edema associated with non-infectious intermediate uveitis, posterior uveitis, or panuveitis. This study is now open to enrollment.

## **Novartis - RKI 983**

Novartis is sponsoring a new clinical trial which is scheduled to kick-off in mid January. The purpose of this new study is to determine whether RKI 983 is a valuable treatment option for patients with primary open angle glaucoma (POAG) or ocular hypertension (OH) in terms of tolerability and safety as well as its effect on lowering intra ocular pressure (IOP). Data from two previous phase I studies suggest that RKI 983 may effectively lower IOP's in patients with glaucoma. This study will begin enrollment at MERSI in February of 2009.

## **EyeGate**

EyeGate is the sponsor of a clinical trial where the study objective is to deliver an ophthalmic solution using the EyeGate® II Drug Delivery System in patients with non-infectious acute anterior segment uveitis. In

this breakthrough concept, the drug (dexamethasone) is transmitted in a non-invasive manner by a non-painful electrical current. The creation of this delivery system was based on over 10 years of development. EyeGate is seeking regulatory approval of this delivery method in both the U.S. and Europe.

## **Merrimack Alpha Feto Protein**

Merrimack Pharmaceuticals is evaluating the efficacy of a protein at treating Birdshot Retinochoriopathy and Sarcoid-related uveitis. This protein, known as alpha-feto protein, is only found in pregnant women.

All 16 patients are now completed with the drug and the follow-up visits. Primary Data Analysis will begin in the first quarter of 2009.

## **Lux Biosciences**

Lux Biosciences have engineered a new immunomodulatory agent (LX211) which is chemically and mechanistically similar to cyclosporine A. These phase 3 clinical trials intend to evaluate the efficacy of this new drug for treating non-infectious uveitis of various etiologies. The preliminary results are very exciting and we look forward to the results soon.

All 3 separate LUX clinical trial protocols will have data locked by February. The first data lock is for the 2nd protocol (Quiescent Uveitis) and it will occur on December 17th. All the subjects from the MERSI site are complete. Primary Analysis will be conducted in the first quarter of 2009.

## **Allergan Posurdex Steroid Implant**

This study tests different doses of the Posurdex steroid implant, which is given by injection in the office to the back of the eye (minor procedure, performed at MERSI) in patients with uveitis. The advantage of this is that the medicated pellet breaks down into carbon dioxide and water. MERSI is part of an international study, with

over 80 participating sites across the world. The Posurdex clinical trial recently completed enrollment as of November 2008 and is in the data collection and analysis phase.

## **MUST**

The Multicenter Uveitis Steroid Treatment study across the USA is funded by the National Institution of Health. The goal is to compare standard medical therapy (immunosuppressive pills taken by mouth) for uveitis with a recently approved steroid implant placed inside the eye (surgery), to see which therapy results in better control of uveitis, which therapy patients prefer, and which has fewer side effects. The steroid implant is the Retisert®, which was approved by the FDA in 2005. Dr. Foster was part of the original study that led to its approval, and some of our patients have had this treatment with good results.

Enrollment is officially complete as of 24-Nov-08. New patients will no longer be offered the opportunity to join the study. Follow-up will continue for each patient for two years.

## **Xibrom**

This study has begun enrolling and we are actively recruiting patients in this trial designed to examine the merits of Xibrom for mild anterior uveitis.

## **ACCEPTED FOR PUBLICATION**

- Visual outcomes after cataract surgery in patients with severe, persistent scleritis. - accepted for publication in Middle East Journal of Ophthalmology
- Systemic lupus choroidopathy - accepted for publication in Ophthalmic Photography
- Bilateral serous detachments in VKH - accepted for publication in Ophthalmic Surgery, Lasers & Imaging

*Continued on page 8*

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## Meet Peter Chang, MD



I recently graduated from Tufts Medical School in May 2008. Two of my mentors at school, Dr. Michael Raizman and Dr. Helen Wu, both trained with Dr. Foster. Through their help and guidance, I came to know Dr. Foster and made the decision to take two years off prior to entering residency to augment my experience in Ophthalmology. Needless to say, I am learning a great deal working with Dr. Foster. I remember when I first started my fellowship, I did not even know what “anterior chamber cells” looked like. The range of ocular pathologies we see daily at MERSI is stunning, and I can think of nothing better than spending two full years here.

I just finished two manuscripts that I will be submitting for publication. The first is a retrospective case series on the use of mycophenolate mofetil (CellCept) as a monotherapy in pediatric uveitis. I am also in the process of completing a study investigating pars plana vitrectomy (PPV) in children. Several of my other projects include subconjunctival injection of bevacizumab (Avastin) as a treatment for pterygium, as well as clinical manifestations and treatments of relapsing polychondritis and Behcet’s disease

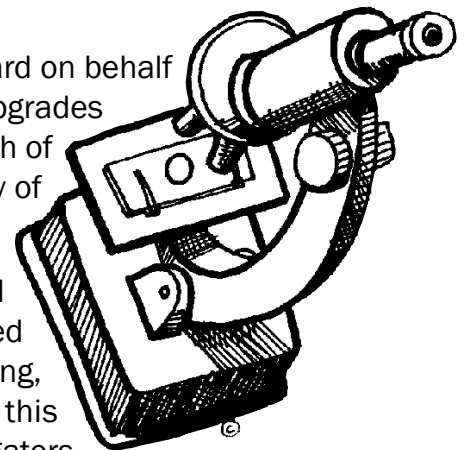
I was born in Taipei, Taiwan and came to the U.S. at the age of 13. My parents and most of my family are still overseas, and I try to go home at least once a year. I began my American education in boarding schools in New Hampshire and Connecticut, followed by undergraduate education at Brown University. After spending another four years as a medical student in Boston, I can now officially call New England my second home. In my free time, I enjoy traveling, biking, cooking, dining out, hanging out with friends, and spending quality time with my girlfriend Liz and puppy Yeti. They are both beautiful ladies that will melt your heart at first sight!

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## MICROSCOPE UPGRADES

Thanks to the financial support of all the patients who work so hard on behalf of the Ocular Immunology and Uveitis Foundation, two microscope upgrades were made possible in 2008, enhancing not only the quality of research of mechanisms causing ocular inflammatory disease, but also the quality of teaching.

The new Olympus microscope, Olympus BX41, allows Dr. Foster and other OIUF Researchers to perform diagnostic microscopy on biopsied tissues while simultaneously teaching the fellow/student who is viewing, through observer eyepieces on the microscope. Prior to acquiring this magnificent piece of optical equipment, students and principal investigators were required to exchange places, back and forth, since only one person could look through the microscope at any one time.



Additionally, the Olympus Bx51 Fluorescence microscope with television transmission of images seen through the microscope, allows the examiner to broadcast the viewed image anywhere one might wish. This state-of-the-art device will enable Dr. Foster to show his students, fellows and visiting doctors precisely what he observes during tissue analysis. This microscope is equipped with a digital image capture system which allows us to save all images on computer, making them available for subsequent use in teaching and in publication of scientific manuscripts devoted to telling the world at large about our discoveries in Foundation research of diseased eye tissue.

## Research Highlights

Cont'd from page 6

- Serum soluble interleukin-2 receptor levels do not correlate with an associated systemic disease in patients with uveitis - accepted for publication in ACTA Ophthalmologica
- Induction of durable remission in ocular inflammatory diseases - accepted for publication in European Journal of Ophthalmology
- Flare-up rates with bimatoprost therapy in uveitic glaucoma - accepted for publication in American Journal of Ophthalmology
- Adverse drug reactions to treatments for ocular toxoplasmosis: A retrospective chart review - accepted for publication in Clinical Therapeutics
- Acute posterior multifocal placoid pigmentepitheliopathy: outcome and visual prognosis - accepted for publication in Retina Journal
- Intravitreal bevacizumab for uveitic choroidal neovascularization - accepted for publication in Ocular Immunology and Inflammation
- Systemic immunosuppressive therapy for eye diseases cohort study research group method trexate for ocular inflammatory diseases: the systemic immunosuppressive therapy for eye diseases

(SITE) cohort study - accepted for publication in Ophthalmology

### **SUBMITTED PUBLICATIONS**

- Intravitreal bevacizumab in refractory uveitic macular edema: One year follow up - submitted to European Journal of Ophthalmology
- Infliximab for the treatment of refractory scleritis - submitted to British Journal of Ophthalmology
- Mycophenolate mofetil (cellcept) therapy for sarcoidosis-associated uveitis - submitted to Ocular Immunology and Inflammation
- Cataract surgery outcomes in children with chronic uveitis - submitted to Journal of Cataract and Refractive Surgery
- Anti-VEGF therapy in the treatment of choroidal neovascularisation associated with sympathetic ophthalmia - submitted to Ocular Immunology and Inflammation
- Intravenous daclizumab in recalcitrant ocular inflammatory disease - submitted to Graefe's Archive for Clinical and Experimental Ophthalmology
- Long-term overall and cancer mortality risk with immunosuppressive therapy for ocular inflammation - submitted to British Medical Journal