"OIUF...making a visible difference"

OIUF
The Ocular Immunology and Uveitis Foundation
Dedicated to Eye Disease Cure and Education

Ocular Immunology and Uveitis Foundation

Massachusetts Eye Research and Surgery Institution

C. Stephen Foster, M.D., F.A.C.S., F.A.C.R.
Clinical Professor of Ophthalmology Harvard Medical School

MERSI

Spring/Summer 2013

An Insightful Decision

The Ramer Family, Left to Right Carroll, Laurel, Amy, Logan

Naturally I can't speak for everyone, but living with an eye disease can be maddening. It is through our sight that we see and experience our world, yet for many of us, it is literally distorted. I live in a community fourteen miles west of Rochester, Minnesota. Those of us in this area consider ourselves lucky to live so close to a world renowned medical clinic. In 1997, at age 37, when I first experienced flashes and floaters in my eyes, it was only natural that I sought treatment there. The retina specialist diagnosed me with Birdshot Retinochoroidopathy and explained it was a rare and potentially blinding disease that can be difficult to treat. As a teaching medical clinic, I remember the line of residents that day waiting to look in my eyes and see this rare disease in a patient. While they were excited to see my eyes, I was sitting in the chair, terrified of my future. The physicians sent me home with a sheet of paper with an Amsler grid printed on it and told me to check the grid weekly. If my vision were to get any worse I needed to come back to the clinic. That was it. I had no follow up, no treatment, and no idea how serious of a condition I really had. Miraculously, my disease entered a period of remission on its own, and for a while, I could forget I was ever diagnosed.

In January of 2007, during a routine physical, I discussed with the general practitioner that I had Birdshot. He scheduled a consult with one of their eye specialists, and surprisingly, I was told by this ophthalmologist that I did not have Birdshot and probably never did. Needless to say I was grateful and once again forgot about this weird eye disease that I no longer had. I thought I was being treated by the best physicians, so who was I to question what I had or didn't have.

I love to hunt and fish and while deer hunting that year, I realized something was wrong with my vision. It couldn't possibly be Birdshot, so I thought maybe I needed glasses. By November, I couldn't see the end of the barrel of my gun, not a comforting thought if you hunted with me that year! This was especially frustrating because one of the biggest bucks I ever saw was standing 25 yards broadside in front of me and I missed him. I knew something was terribly wrong. Later that month, I went back to the same world renowned clinic and once again saw a retina specialist. This time, they positively diagnosed me with Birdshot Retinochoroidopathy through a series of blood work. My vision, especially in my right eye (my shooting eye), was poor. I was immediately put on oral steroids and scheduled for follow up visits. By this time, I saw the writing on the wall that what I had was serious and I was frightened. At the same time my heart told me that I needed a second opinion. The internet was my resource and I went to work. A "Dr. Foster" kept coming up in my research, so I reached out with a phone call.

You may argue that you can't judge the character of a man by one simple phone call and I would tend to agree with that, but, as Paul Harvey would say "Now for the rest of the story." I called MERSI on a Saturday and simply left a short message explaining my situation. The next day, a Sunday, I was out of the house but my wife received a call personally from Dr. Foster. They spoke about my situation and he shared with her that indeed what I had was serious and that if I were to fly out to Boston he would work me in immediately. I was astonished that a doctor would actually make a personal call to me, let alone on a Sunday. In my mind this was not your run of

Continued on page 7

Calendar of Events

August 25, 2013
Boston Walk for Vision
Cambridge, MA

September 22, 2013
NY/NJ Walk for Vision
Verona Park, NJ

September 28, 2013
2nd International Symposium on Birdshot Retinochoroidopathy
Boston Marriott Copley Place

October 15, 2013
Uveitis Support Group – Let's Talk About It
MERSI – 1pm – 2pm

November 8, 2013
9th Annual Auction Benefit
Mandarin Oriental Boston

January 14, 2014
Uveitis Support Group
MERSI – 6:30pm

March 11, 2014
Uveitis Support Group – Let's Talk About It
MERSI – 1pm – 2pm

Cut along the dotted line and retain for reference.

OIUF

THE OCULAR IMMUNOLOGY AND UVEITIS FOUNDATION

Dedicated to Eye Disease Cure and Education

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.

How You Can Make A Visible Difference

Your gifts and donations help the work of the Ocular Immunology and Uveitis Foundation in achieving our mission.

To help meet your philanthropic goals, OIUF accepts gifts of many types, including appreciated securities, bequests, real estate, qualified retirement and life income gifts.

***For more information please contact Alison Justus at* (617) 494-1431 x112**
or email oiuf@uveitis.org

Please use the enclosed envelope for your donation

OIUF is going green!

If you would like to receive this newsletter via email, please contact Alison Justus at ajustus@mersi.com

Letter from Our President

C. Stephen Foster, M.D.

After a long winter, there is nothing more enjoyable than Spring arriving in New England. One of the most beloved days to Bostonians, Patriot's Day, was turned upside down by the horrific events at the Marathon and the violence that continued days later, just a block away from MERSI and OIUF. I am relieved to report that our MERSI and OIUF staff are safe. Despite the darkness of that week in April, the light of the human spirit shone strong over our city. We received numerous calls and emails from patients and physicians from all over the globe, inquiring about our safety and sending prayers and well wishes. I was truly touched by the outpouring of support from you, our OIUF family, and was reminded yet again of the steadfast bonds created since the Foundation was born.

As life in Cambridge moves forward, so too does the future of OIUF. We have an exciting 2013 ahead of us. In May, my wife Frances and I will travel to Poland for the LEXUM Alliance, devoted to continuing education of ophthalmologists in Poland. Frances, a nurse practitioner and Chair of the Uveitis Support Group at OIUF, and I will teach a multi-hour course, and I will give additional lectures. Our next stop will be Russia, for the annual "White Nights" Congress, so-called because in late May, given the geographic location of St. Petersburg, it remains light about 21 hours of the day. While there, I will give lectures on Pediatric Uveitis.

This year's Fellows class continued to impress the ophthalmology community at ARVO, as you will read about, with many Fellows presenting their research conducted through the Foundation. We wish them well in their future endeavors and welcome a new class of young minds in July 2013.

August brings the annual Boston Walk for Vision, a beautiful 5k walk along the Charles River, followed by the New Jersey Walk in September. Later that month, OIUF will host the 2nd International Symposium on Birdshot Retinochoroidopathy. I have the pleasure of co-organizing this conference with Phuc Lehoang, MD, PhD, of Paris, France. Patients and physicians from across the globe will gather in Boston to discuss the latest topics and treatments surrounding this extremely rare form of posterior uveitis. I cannot express enough the importance of early diagnosis and treatment surrounding this disease, as illustrated by Carroll Ramer, who shares his personal battle with Birdshot in this newsletter, and I encourage all Birdshot patients and their families to attend. The conference has an impressive list of faculty, including Robert Nussenblatt, MD, Chief of the Clinical Center of the National Eye Institute at NIH in Bethesda, Maryland, who delivered the C. Stephen and Frances Foster annual lecture on Ocular Immunology at Duke University this past February.

After three years at The Liberty Hotel, we are moving the annual Auction Benefit to the Mandarin Oriental Hotel in Boston, which will be held on November 8th. We hope you will join us in the coming months for these exciting events.

The world of social media and internet capabilities has been tremendous in sharing the latest developments at OIUF, including fundraising efforts for our annual Walk for Vision. Our weekly analytics show just how many people around the world are benefitting from the services we are able to provide through generous donations from our supporters. On behalf of the Fellows and patients who lives are transformed by such gifts, I extend my sincerest gratitude.

Warmest regards.

C. Stephen Foster, MD

Where Are They Now: Former OIUF Clinical Fellow Paul Yang, MD

I was barely one year old when my family emigrated from Taiwan to Seattle. Growing up, I could always remember my mother telling me, "It doesn't matter what you do, as long as you strive to do it better than anyone else." After two decades of college, graduate school, medical school, internship, and residency, I found myself in Cambridge, Massachusetts, walking across Main Street from the Kendall Hotel to 5 Cambridge Center to interview with Dr. Foster for an OIUF fellowship position in ocular immunology and uveitis at MERSI. After a firm handshake accompanied with strong unforgettable eye contact, we strolled along the windows on the 8th floor overlooking MIT as I listened to his philosophies on building a culture of always "doing the right thing" and providing the best possible patient care and service. With the echoes of my mother's advice in my subconscious, I was hooked. My Clinical Fellowship the following year through OIUF would be the most influential of my career. As with anything in life, no one can force another human into being a better person. You do that yourself, because someone inspires you. Beyond the tried and true, Dr. Foster inspired me to be a better physician and surgeon and opened my mind to new possibilities for clinical research. We developed a protocol to better study and efficiently characterize the numerous complex proteins that regulate the immune system. After a year of studying individuals affected with birdshot retinochoroidopathy, we made some very interesting novel discoveries that have been accepted for publication in the American Journal of Ophthalmology. Not only do these findings have implications in the application of new therapies for birdshot retinochoroidopathy, but they may also change the way we treat other ocular inflammatory diseases. This discovery was the product of the cumulative intangibles of OIUF's premier fellowship conducted by a master mentor, Dr. Foster.

Since my graduation from the OIUF Fellowship program in 2012, I received the Alan Laties Career Development Clinical Research Fellowship Award from the Foundation Fighting Blindness, which supports my current fellowship at Casey Eye Institute at the Oregon Health and Science University. Not a day goes by when I see patients or while conducting research that I don't use the skills I gained as an OIUF Fellow. Applying what I have learned at MERSI through OIUF, I hope to better our understanding of secondary immune-mediated damage in degenerative retinal conditions. Thereafter, I hope to return as a faculty member to the Moran Eye Center at the University of Utah.

Past Fellow Albert Vitale, MD; Paul Yang, MD and C. Stephen Foster, MD gather at last year's FOIS (Foster Ocular Immunology Society) dinner at ARVO. Dr. Vitale is also a guest Speaker at the 2nd International Symposium on Birdshot Retinochoroidopathy in Boston on September 28, 2013.

Past and current Fellows reunite at ARVO

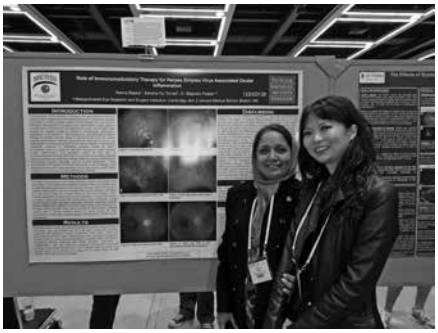
2013 ARVO National Meeting

2013 Ocular Immunology and Uveitis Foundation Travel Grant Recipient, Katie Bryant-Hudson, PhD

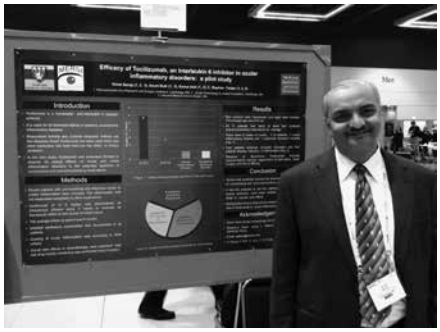
As a recipient of the Ocular Immunology and Uveitis Foundation Travel Grant, I was able to attend the 2013 ARVO Annual Meeting and present my research. The title of my talk was "Loss of HSV-1 induced VEGF-A during acute infection impairs the lymphangiogenic response during later stages of disease". It is anticipated that results from this study may lead to new treatment strategies to attenuate the development of herpetic stromal keratitis. I greatly appreciate the opportunity to share my work with esteemed researchers in various fields of ocular immunology, including microbial pathogenesis and neovascularization. ARVO provides a great environment to network with fellow ocular immunologists and establish connections for future collaborations.

2013 Stephen and Frances B Foster Travel Grant Recipient, Elizabeth Berger

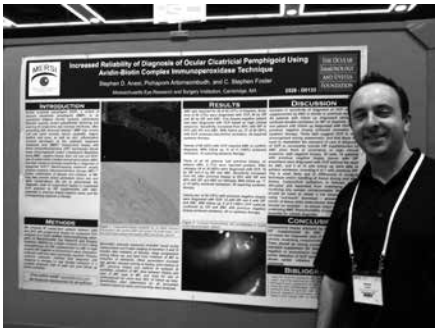
It was with great pride that I received the C. Stephen and Frances B. Foster Foundation Travel Grant during the ARVO 2013 Conference in Seattle, WA. I am honored to have been chosen to support my work in ocular inflammatory disease and assist in my attendance of this annual meeting. My research focuses on a neuropeptide-based treatment of P. aeruginosa-induced keratitis, which primarily effects the increasing population of contact lens wearers. However, the clinical implications extend beyond the cornea and can be applied to many other inflammatory diseases, as well. Sharing the translational relevance of my work with ocular immunologists and ophthalmologists, as well as biotech companies, moves this novel therapeutic approach closer to clinical development. It is an inspiration to be recognized in such a manner. I hope that in the future, I am also able to support others in their research endeavors and encourage them in their work as you have done by recognizing me.



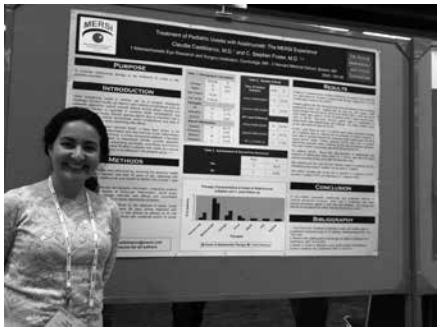
Current Research Fellow Asima Bajwa, MD and current Clinical Fellow Sandra Hu Torres, MD present their research on the Role of Immunomodulatory Therapy for Herpes Simplex Virus Associated Ocular Inflammation



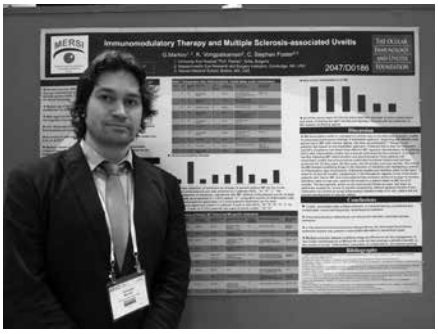
Current Clinical Fellow Vimal Sarup, MD presents his poster on Efficacy of Tocilizumab, an Interleukin 6 inhibitor in Ocular Inflammatory Disorder: A Pilot Study



MERSI Staff Physician Stephen Anesi, MD, presents his research on Increased Reliability of Diagnosis of Ocular Cicatricial Pemphigoid Using Avidin-Biotin Complex Immunoperoxidase Technique



Current Clinical Fellow Claudia Castiblanco, MD presents her poster on Treatment of Pediatric Uveitis with Adalimumab: The MERSI Experience



Current Research Fellow Gueorgui Markov, MD presents his poster on Immunomodulatory Therapy and Multiple Sclerosis-associated Uveitis

Past and current OIUF Fellows gather for dinner in Seattle

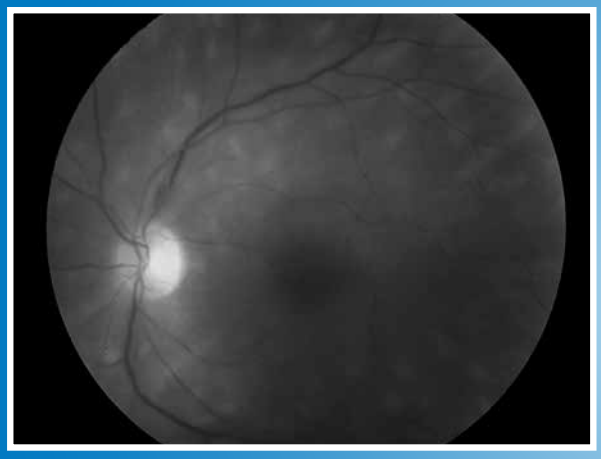
SAVE THE DATES

WALK FOR VISION: BOSTON

Sunday, August 25, 2013

NY/NJ

Sunday, September 22, 2013



THE SECOND INTERNATIONAL SYMPOSIUM ON BIRDSHOT RETINOCHOROIDOPATHY

Saturday, September 28, 2013
The Boston Marriott Copley Place
Boston, MA

8TH ANNUAL AUCTION BENEFIT: AN EVENING DEDICATED TO MAKING A VISIBLE DIFFERENCE

Friday, November 8, 2013
The Mandarin Oriental
Boston, MA
7:00pm-10:00pm

OIUF

THE OCULAR IMMUNOLOGY AND UVEITIS FOUNDATION

Dedicated to Eye Disease Cure and Education

To register for the Boston Walk, visit:
https://sna.etapestry.com/fundraiser/OcularImmunologyandUveitis/walkforvisionboston2013/

To Register for the NY/NJ Walk, visit:
https://sna.etapestry.com/fundraiser/OcularImmunologyandUveitis/newjerseywalk2013/

For more information, visit www.uveitis.org

An Insightful Decision *from page 1*

the mill physician, this was different. Here was a doctor that would take the time to call someone, talk, and share that there was hope and alternative treatments that had tremendous long term promise. I was in Boston two days later and saw Dr. Foster, who immediately began his treatment recipe of CellCept and cyclosporine and took me off the steroids. Hence began a six year journey of traveling to Boston every six to seven weeks to receive my care. If it wasn't for my heart telling me that perhaps I needed a second opinion, I do not know where my vision would be today.

Throughout these years, I have remained committed to MERSI, Dr. Foster, and the Foundation which he founded. Admittedly, it is not convenient to travel to Boston every six weeks, sometimes more often than that and I don't always enjoy the flights and hotels and the hassles with travel. Yet, I can say my visits with Dr. Foster give me renewed hope that I am in fact doing OK. I have had my share of good and not so good visits. The bright side is that with the "cocktail" of CellCept and cyclosporine, my Birdshot is now quiet and has been for three years. However, I have paid my dues with macular edema, glaucoma, cataracts, and an epiretinal membrane, all in my right eye. In 2010, I had multiply surgeries in my right eye, including a Retisert implant, an Ahmed valve implant, and a new lens. I have graduated from immunomodulatory treatments and my only medications today include an oral dose of Celebrex and multiple eye drops. I look back to 2009, when in one visit Dr. Foster recommended that I get a shot in my right eye. As I waivered in my decision, he asked me if I wanted to be a chicken about this. Needless to say, I had that shot and several after that, and he has never called me a chicken since. I have all the faith in the care that I'm receiving at MERSI and when he gives me a recommendation today, I reply with a simple "Whatever you say, Doc."

While I do not know what my visual future holds, I consider myself blessed to have 20/20 vision in my left eye and 20/25 vision in my right eye as a patient with birdshot retinochoroidopathy. It is my prayer that with continued research, like such conducted through OIUF, and the Fellows, including Dr. Paul Yang, who completed the OIUF Fellowship program with a particular interest in this rare disease, that there will soon be even more hope for those of us plagued by birdshot. Despite a few visual nuances, I feel extremely lucky. I could have an attitude of self-pity and question why, but that would only make life worse. I have been dealt this hand and I can't change it. It is what it is. All I can do is accept what I've been dealt and move on. I am blessed to have a supporting family that understands my situation and freedom in my work to travel to Boston so regularly. I am so very lucky that I picked up the phone on a Saturday and called Dr. Foster for that second opinion. While the famous clinic so close to my home is supposed to be one of the best, sometimes in life we have situations where we may need to travel further up the food chain to find the "King of the Jungle." That is why I travel to Boston and will continue to do so as long as needed. As I "SEE" it, Dr. Foster is the King. With a loving family, knowing that this is in God's control and not mine, and my extraordinary faith and belief that I'm being treated by the best gets me through the uncertainties of where my vision will be in the future. I'm forever grateful for Dr. Foster and the MERSI team and the research conducted through OIUF that has led me to the remission I enjoy today.

In Memoriam

Rev. Susan Goodwin directs a portion of her estate to support OIUF

It is with great sadness that OIUF learned of the passing of Reverend Susan Carol Goodwin, 57, of Waldoboro, ME on January 11, 2013 after a long battle with lung disease. She had a wonderful way with words, but also believed strongly in the "doing" aspects of ministry, evident in her passionate work on many UCC state conference committees, including the Commission for Witness and Action. Susan also had uveitis and while her first love was her faith, she was very grateful to Dr. Foster and the work of OIUF for preserving her vision and allowing her to indulge in her remarkable talent and love for history, architecture, design, photography, and the beauty of the natural world. Susan's generosity will forever live on at OIUF as portions of her estate will help support the mission of the Foundation and improve the lives of others suffering from ocular inflammatory disease.

Uveitis Support Group

The Uveitis/OID Support Group is a patient education and mutual support resource founded in 1996 by Dr. Foster, Frances Foster MS, NP, John Hurley LICSW, and patients of Dr. Foster. Our mission is to educate patients, their family members and friends, and the medical community about ocular inflammatory disease and to facilitate the exchange of information, emotional support, and mutual aid between members. We are also deeply committed to raising funds to support research related to the causes and effective treatment of uveitis/OID.

Please take advantage of all our free services in this upcoming year: support group meetings; online support groups for kids and adults; the website with a support group page for adults, parents, and children; parent/teacher guide; and A Guide to Ocular Inflammatory Disease. Our support group runs on generous contributions to the support group under the Foundation from our members, their family and friends.

We have six support group meetings a year. The meetings are committed to support, not criticism, and no medical advice is given unless the person has a medical degree to do so. All meetings are based at the Massachusetts Eye Research and Surgery Institution (MERSI) in Cambridge, Massachusetts. The time of each meeting varies to try to meet the needs of our members with some occurring in the day and others in the evening. Please see the event calendar for the next upcoming meeting.

Can't attend a meeting? Get support online!

In addition to the onsite meetings, the Uveitis/OID Support Group has an online support group and informational website for adults, parents, and kids. For more information, point your web browser to www.uveitis.org and click on the Support Group links for a list of these wonderful and informative resources.

Or if you just want to ask a question of an expert, go to our "Ask Dr. Foster" page.

facebook The Ocular Immunology and Uveitis Foundation reaches over 1150 fans on Facebook! Are you one of them? Visit the OIUF page at www.facebook.com/ocularimmunologyanduveitisfoundation and click the "Like" button at the top of the page to receive the latest updates about our activities and photos of our recent events, including the Walk for Vision and the annual Auction Benefit.

New Teen Support Group on Facebook! Kids 14 and older are welcome to join this private group for teens with ocular inflammatory disease. Email Ashley Floreen at afloreen@mersi.com to join!

OIUF is now on Twitter! Follow us at http://twitter.com/#!/uveitis1

The Kids Club is back! Check out our updated online support group for kids 13 and under. Email adult moderator Liz Irvin at eirvin@comcast.net for the protected password.

Resources:

Documentaries for sale:
Pricing: $20.00 per DVD. Extra charge for international shipping applies.

1. **Uveitis: The Adult Experience.** Features 3 adults who all were diagnosed with uveitis in adulthood and talks about their treatment, coping, and outcomes to care.
2. **Growing Up with Uveitis: The Child's Experience.** Features 3 females who have uveitis related to juvenile arthritis and their different experiences and treatments as well as outcomes related to their particular types of treatments.

Free guides:

A Guide to Ocular Inflammatory Disease (OID): Discusses different types of OID, causes, and treatment step ladder.

A Guide for Teachers and Parents: Gives an overview of uveitis, effects on vision, and tips to employ to help children adapt in school.

Bracelets: adult or child sizes: Colors for adults are red, blue, and combo blue mixed with red. Child sizes are combo color only. Bracelets are $2.50. Discount offered if bought in bulk.

If interested in our products, order online or email: ffoster@mersi.com or call 617-494-1431 ext 112

Scleritis

What is scleritis?

Scleritis is inflammation of the tough, white structural wall of the eyeball, the sclera. The sclera is made of collagen and is continuous with the cornea, the clear window through which we see that makes up the front wall of the eye. Blood vessels run along and sometimes through the sclera, and can contribute to inflammation. The thin outside layer of the sclera, the episclera, can also be inflamed, but episcleritis is typically neither as severe nor symptomatic as scleritis. Swelling and severe inflammation of sclera can occur in one or both eyes, can affect surrounding tissues, and be quite dramatic and dangerous to vision.

Are there different types of scleritis?

There are several types of scleritis. Scleritis can be either anterior, in the front of the eye and visible during exam, or posterior, behind the eye and not visible during exam. Anterior scleritis can be sectoral or diffuse, depending on how much of the visible sclera is affected. It can also be nodular, presenting as a focal mound or elevation of inflamed tissue. Necrotizing scleritis, or scleromalacia perforans, is considered the most severe form of scleritis, and can cause dangerous thinning, potentially leading to perforation and loss of the eye. Even more alarming is the fact that necrotizing scleritis can at times present with voracious inflammation and be obvious and symptomatic, but at other times can be asymptomatic without obvious inflammation, with progression unknown to the patient until seen by the ophthalmologist. Scleritis can also occur in conjunction with inflammation of uvea, cornea, or other parts of the eye.

What causes scleritis?

Scleritis is most often idiopathic, or of unknown cause to the ophthalmologist, despite diagnostic measures. Autoimmune inflammation and infection are the two main causes, though trauma can be an inciting factor. Deposition of immune-complexes, or particles comprised of antibodies bound to another molecule (antigen), drive inflammation in a given area or sclera. The distinction between episcleritis and scleritis is of particular concern to the ophthalmologist – episcleritis is a benign condition where as scleritis can sometimes be a presenting sign of dangerous, and potentially fatal, underlying systemic disease.

What are the symptoms of scleritis?

Hallmark symptoms of scleritis are redness and pain. Redness may be isolated to a particular area of the eye, or diffuse. Pain can be excruciating, and is often worse with eye movement. Vision can be affected if swelling from inflammation affects surrounding tissues such as lens, cornea, choroid, retina, or optic nerve. Lid swelling can occur. Light sensitivity is not usually a symptom unless cornea (keratitis) is also involved.

What other medical conditions are associated with scleritis?

As stated above, scleritis can be a sign of more ominous systemic diseases. The most common association is with rheumatoid arthritis. Other non-infectious causes are systemic lupus erythematosus, inflammatory bowel disease, relapsing polychondritis, ankylosing spondylitis, gout, and reactive and psoriatic arthritis. Systemic vasculitis is another cause, and includes the ANCA-associated vasculitides such as granulomatosis with polyangiitis (formerly Wegener's granulomatosis), microscopic polyarteritis, and Churg-Strauss syndrome. Herpes simplex is a common cause of infectious scleritis, however syphilis, bacteria, tuberculosis, and fungi are also known causes.

How is scleritis diagnosed?

As with all ocular inflammation, a careful history and review of systems is done. Note is taken of potential systemic issues which have symptoms revealed on review of systems, i.e. joint swelling, rash, abdominal pain. Examination reveals inflammation of deep scleral vessels, or areas of necrosis (cell death) and scleral thinning, which can be photographed for the record. Eye drops may be able to more easily distinguish between inflammation of sclera and episclera when it is unclear. Posterior inflammation is usually not visible on exam, and the ophthalmologist can use ultrasound, looking for signs of inflammation behind the eye. Occasionally changes in retina or optic nerve appear from posterior inflammation. Serologic evaluation is typically performed to search for possible autoimmune or infectious causes. Lastly, scleral biopsy with microscopic evaluation of prepared tissue can give important information on specific patterns of inflammation seen and the presence or absence of certain infectious organisms.

What are complications from scleritis?

The most dreaded complication of scleritis is perforation, which can lead to dramatic vision loss, infection, and loss of the eye. Damage to other inflamed areas, such as cornea or retina, may leave permanent scarring and cause blurring. Chronic pain can be debilitating if not treated. Patients may suffer complications from treatment more often than disease itself, with development of cataract or secondary glaucoma from chronic corticosteroid use.

How do you treat scleritis?

Treatment should be aimed at quieting inflammation quickly. Antibiotic therapy can be used when an infectious cause is shown or even highly suspected, along with topical corticosteroids for some infections (never fungus). For non-infectious causes, oral or topical corticosteroids can be used, as well as oral or topical non-steroidal anti-inflammatory drugs (NSAIDs). Periocular corticosteroid injection is a debated subject, as some fear that areas of necrosis are at higher risk for melt and perforation, though evidence suggests that treatment of non-necrotizing scleritis with injections is effective. Intravenous steroids can also be used. Of course, dependence on steroid therapy should be avoided due to complications of long term steroid use.

Systemic therapy, by mouth, injection, or intravenous infusion, can be necessary to treat chronic or recurrent scleritis. Immunomodulatory therapy, utilizing a step-ladder approach, can be used effectively for non-infectious scleritis, with regular monitoring for blood work and side effects. Surgery to repair perforated sclera, or bolster dangerously thinned sclera, can be done with prepared scleral grafts, or other similar available sterile tissue.

2012-2013 Fellowship Update

As graduation season approaches, we prepare to say farewell at the end of June to our three Clinical Fellows: Sandra Hu Torres, MD; Claudia Castiblanco, MD; and Vimal Sarup, MD. The past year has certainly been a memorable one for our Fellows, as you will see in their own words below.

Left to right: Dr. Hu Torres, Dr. Castiblanco and Dr. Sarup

Sandra Hu Torres, MD

In 2012, I was working in New York as a private ophthalmologist after graduating from residency in June 2011 and wanted to expand my knowledge base with more training. I heard from Dr. David Chu, a former graduate of my residency program who completed a Fellowship with Dr. Foster, about the invaluable experience he had in Cambridge. I came up for a visit and felt in love with the one-of-a-kind place that is MERSI. Indeed, the practice is a well-oiled machine, where infusions, testing and consulting are all done efficiently together for the treatment of ocular inflammatory disease, which is unheard of in the average ophthalmology office. After the inspiring visit, I moved to Boston and began my journey with Dr. Foster and never looked back. Dr. Foster has taught me how to be deliberate both in diagnosing disease and in communicating with the patient. He showed me that it is important for the patient to actively participate in his/her own treatment plan and decide his/her own path. He taught me to constantly "dig deeper" into the history and review of system for clues of systemic disease. Seeing the complex surgical cases and watching how Dr. Foster handles difficult scenarios in the operating room has built my confidence as a surgeon. I am truly humbled by my experience and am forever enriched by my year as an OIUF Fellow.

In August 2013, I will be joining a private ophthalmology group on the north shore in Massachusetts, practicing with an emphasis on uveitis, glaucoma and general ophthalmology.

Claudia Castiblanco, MD

Thanks to the support from OIUF, I have been able to obtain an enriching experience as a clinical fellow at MERSI during the past year. The best moments have come from interacting with so many patients with such diverse eye diseases that come from all over the state, country and world. Working with Dr. Foster and learning from him in the clinic and in the operating room has been invaluable and has strengthened my skills necessary to excel in a career in ophthalmology, particularly uveitis. Additionally, the attention on research has enabled me to explore different areas of ocular inflammation that I would not have had exposure to if it had not been for OIUF. Moreover, I am forever grateful to the funding provided by the Foundation that allowed me to attend the American Academy of Ophthalmology Annual Meeting in New Orleans, the Uveitis Fellows' Forum in Miami and ARVO in Seattle.

As I finish my training, I am eager to begin the next chapter in my career. I will be joining a private practice in Westport and Norwalk in Connecticut as a general ophthalmologist and uveitis specialist.

Vimal Sarup, MD

The OIUF fellowship with Dr. Foster has been unforgettable. Dr. Foster sets an example in every aspect of patient care each day. Observing him on a day to day basis has taught me how to deal with each patient in a comprehensive manner. He remains at the forefront of ophthalmology, whether it is surgical techniques, clinical research, diagnostic technologies or the latest therapeutic agents. Dr. Foster is fully involved in teaching and exposes all of the Fellows to treatment protocols and procedures of all complexities. I have enjoyed the past year immensely and look forward to using the knowledge I have gained as a Fellow in my future practice as an ophthalmologist.

Research Highlights

Novartis LFG:

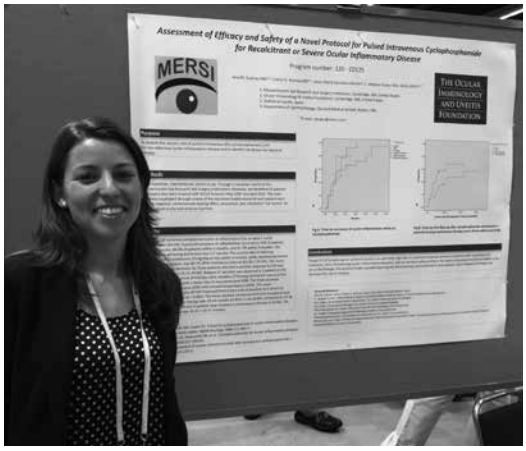
This study will assess the safety, tolerability and effect of intravitreal LFG316 in patients with active Multifocal Choroiditis and Panuveitis. Eligible patients will be 18 to 65 years old, have active multifocal choroiditis, as evidenced by vitritis in the study eye of 2+ or more, and a visual acuity score of 60 letters or less. The study evaluations include blood tests, visual assessments, vital signs, and a standard ophthalmology examination.

XOMA:

XOMA has begun testing of Gevokizumab, a monoclonal antibody that binds strongly to interleukin-1β (IL-1β), a pro-inflammatory cytokine shown to be involved in non-infectious uveitis including Behcet's uveitis, cardiovascular disease, and other auto-inflammatory diseases. By binding to IL-1β, gevokizumab inhibits the activation of the IL-1 receptor, thereby modulating the cellular signaling events that produce inflammation. Gevokizumab has potential for the treatment of non-anterior, non-infectious forms of uveitis, inflammation of the heavily vascularized layer of the eye. People with these types of uveitis may experience decreased vision, pain, light sensitivity and floaters. Uveitis can lead to permanent vision loss. The inflammation that leads to non-infectious uveitis has been shown to be IL-1 mediated. Patients with active and inactive uveitis may be eligible for this trial.

Santen Sirolimus DE-109 Injectable Study

This study, sponsored by Santen, Inc., aims to assess the safety and efficacy of intravitreal injections of DE-109 for the treatment of active, non-infectious posterior uveitis. This study is multi-national, and aims to enroll approximately 500 patients across 150 sites. This study has three groups of varying dose administration size; no eligible patients will receive a placebo in this study. Eligible patients will have non-infectious uveitis of the posterior eye, will be 18 years or older, and will have to meet certain inflammation criteria. Certain conditions will exclude patients from this study, such as ocular lymphoma, uncontrolled glaucoma, certain drugs and devices (pending a specified wash-out period), and significant ocular diseases, like diabetic retinopathy, wet age-related macular degeneration. The duration of this study is 12 months. This is comprised of a screening period, treatment period, and then a safety follow-up. Drug is in the form of intravitreal injections; standard ophthalmic exams are part of each treatment phase exam (about once a month). Additional tests are necessary at the initiation and termination of the study – personal surveys, blood testing, fundus photography, fluorescein angiography, and optical coherence tomography. The dosing amount is randomly selected.



OIUF Research Fellow Ana Suelves, MD presents her poster on Analysis of a Novel Protocol of Pulsed Intravenous Cyclophosphamide for Recalcitrant or Severe Ocular Inflammatory Disease

OIUF Develops Novel Protocol for Cyclophosphamide Use in Ocular Inflammatory Disease

Blindness from ocular inflammatory disease has not decreased in the last 35 years despite advances in medical therapy, and many patients end up depending on chronic doses of corticosteroids to help quiet otherwise uncontrollable inflammation. Cyclophosphamide (Cytoxan®; Baxter Healthcare Corporation, Deerfield, IL) is a medication that has been used for over 60 years to treat severe and vision-threatening or stubborn forms of non-infectious ocular inflammation that do not respond to less aggressive therapy. Most reports in the literature on use of cyclophosphamide for eye disease involve oral therapy, which has been thought to be more effective in achieving long-term remission of inflammation, but also associated with higher risk of adverse effects. The protocol for cyclophosphamide use at MERSI, presented in this study, has evolved over many years, and involves intravenous administration of medication every 2 weeks (sometimes weekly) rather than the 4 week interval used for most rheumatologic disease, and is tailored to each patient based on their response to therapy at each individual treatment. We aimed to share this with the community of providers treating ocular inflammatory disease to help benefit those patients with severe and difficult to treat disease. Many providers not familiar with this frequency of use have expressed concern about the safety of this regimen. The results of this study show an extremely high rate of sustained complete remission of ocular inflammation with this regimen of cyclophosphamide therapy, higher than other studies have shown in the past, and that medication is well-tolerated by most patients with an excellent safety profile.

OIUF
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Publications of Interest to Physicians and Patients for Sale

Foster, C.S., Bhatt, P., Yilmaz, T., Cervantes, R., Mauro, J. **Atlas of Ocular Inflammatory Disease. 2009.** Cost **$198.00**

The photographs were taken from the MERSI archives and will provide a unique resource for ophthalmologists world-wide to view various types of lesions caused by ocular inflammation as a result of roughly 100 different disorders, enabling them to more readily recognize and diagnose these diverse disorders.

Foster, C.S., Amorese, L., Dacey, M., Rosenbaum, R. **Birdshot Retinochoroidopathy. 2010.** Cost **$50.00**

Monogragh from the Ocular Immunology and Uveitis Foundation's International Symposium on Birdshot Retinochoroidopathy held on October 4, 2008 at the Broad Institute in Cambridge, MA.

This monograph is based on the lectures delivered by the following experts in the field, Janet Davis, MD, David Hinkle, MD, Phuc Lehoang, MD, PhD, Robert Nussenblatt, MD, Aniki Rothova, MD, and C. Stephen Foster, MD. It includes comprehensive information about this condition, including etiology, tests and treatment done for patients.

Foster, C.S., Anesi, S., Gonzalez, L., Palafox, S. **Childhood Uveitis. 2011.** Cost **$50.00**

Monograph from the Ocular Immunology and Uveitis Foundation's Symposium on Childhood Uveitis held on August 7, 2010 in Cambridge, MA.

This monograph is based on the lectures delivered by the following experts in the field, Janis Arnold, David Chu, MD, David Hinkle, MD, C. Egla Rabinovich, MD, MPH, C. Michael Samson, MD, MBA, H. Nida Sen, MD, MCHc, Howard H. Tessler, MD, Patrick Whelan, MD, PhD, and C. Stephen Foster, MD.

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