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## Insight from the Chair



Dear Friend,

You are receiving this first edition of the *UMass Insight* (UMI) newsletter, because of your valuable support of our Department's mission.

In this new quarterly newsletter, we highlight events and progress within the Department of Ophthalmology & Visual Sciences at the University of Massachusetts Medical School.

We hope you find *UMass Insight* interesting and thought provoking. Please share your comments, ideas, and thoughts by emailing us at: [eyedoctors@umassmed.edu](mailto:eyedoctors@umassmed.edu)

Sincerely,

**Shlomit Schaal, M.D., Ph.D.**



## News from the Department of Ophthalmology & Visual Sciences

### Faculty Insight

#### Ophthalmology Physician Champion



David Hinkle, M.D., completed the UMass Memorial Physician Leadership Development Program, at Worcester Polytechnic Institute in May 2016, and received a green belt in LEAN management training. His project focused on reducing medical expenses for patients at the UMass Memorial Eye Center, through utilization of generic medication alternatives, and increasing the number of standardized protocols for eye surgeons operating in the Ambulatory Surgery Center.

Dr. Hinkle has served as the Ambulatory Physician Leader for the Eye Center since 2015. He was instrumental in the recent transition to the use of Central Scheduling, allowing Eye Center staff more time to devote to patient service, and increasing the number of weekday evening hours in which patients can schedule appointments. Dr. Hinkle was recently named Physician Champion for the Ophthalmology Department, due to leading efforts to improve physician engagement. He is also developing metrics to assist the Department to meet institution-wide quality improvement goals.

#### Clinician Scientist



The Department of Ophthalmology & Visual Sciences is proud to welcome Haijiang Lin, M.D., Ph.D. as a faculty member. Dr. Lin is an Ophthalmologist fellowship trained in medical retina. He will serve as a general Ophthalmologist, and will provide excellent eye care for patients suffering from multiple eye conditions, including cataracts, glaucoma, dry eye, diabetic retinopathy, retinal vascular disease, age-related macular degeneration, and eyeglass prescriptions.

During his work at McGill University and the Whitehead Institute at the Massachusetts Institute of Technology (MIT), he discovered several genes involving ubiquitin conjugation and deubiquitination, a key mechanism of cellular homeostasis. He created de novo DNA methyltransferase gene (Dnmt 3a and 3b) knockout and conditional induction mice, and studied the function of DNA methylation in tumor formation and stem cells. Dr. Lin held faculty appointments at Harvard Medical School, Massachusetts Eye and Ear Infirmary, and University of Texas.

Dr. Schaal expressed her confidence that Dr. Lin will serve as an excellent junior faculty member. "As a clinician-scientist, Dr. Lin has a unique insight towards the basic molecular mechanisms that lead to blinding eye diseases. He will serve as a bridge between our basic science vision scientists and our clinicians."

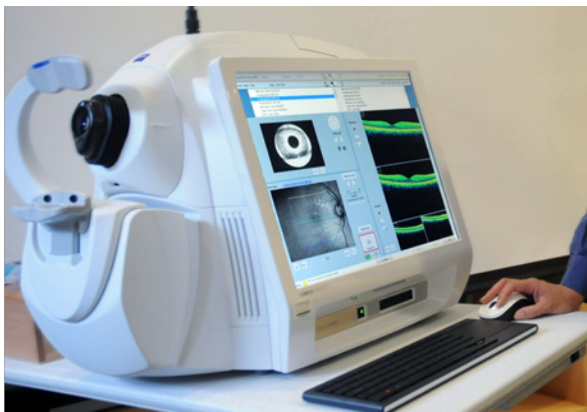


## News from the Department of Ophthalmology & Visual Sciences



### Clinical Insight

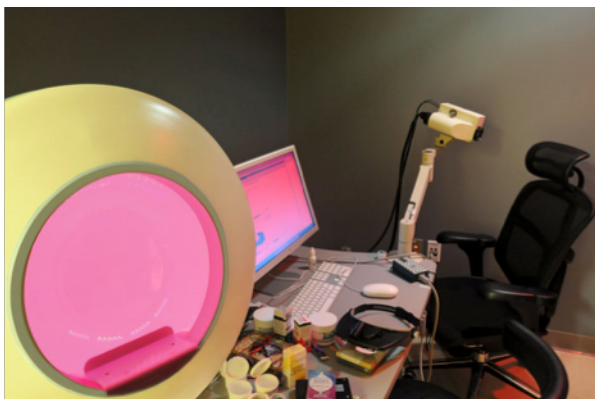
## The New OCT Angiography machine brings excitement to the Ophthalmic Clinicians and Researchers



The new technology advancement OCT machine (Optical Coherence Tomography) is now part of the Department of Ophthalmology & Visual Sciences at the University of Massachusetts.

In contrast to the previous versions of OCT, this machine allows clinicians to observe fine details of the retinal vasculature, both normal and abnormal. This advanced non-invasive OCT machine which does not require dye, already provides a huge advantage for patients by avoiding discomfort and the tedious procedure of the dye injection.

The New OCT machine uses a unique algorithm that detects movement of red blood cells as a contrast. The algorithm can also separate and visualize different layers of the retina and choroid vasculature. The software has a color coded option that allows depth visualization of retinal blood flow. So what does that mean to clinicians? This exciting new technology offers the opportunity to look at various retinal diseases in a completely different perspective, creating novel research opportunities for scientists to understand further the origin and mechanism of pathologies.



## Retina Service Acquires ERG machine for clinical practice, first and only in Worcester area

The Department of Ophthalmology & Visual Sciences has officially acquired an *ERG* (*electroretinogram*) machine. The *ERG* will be utilized in the Retina service and will be the first and only machine in the Worcester area. The *ERG* test can aid Retina specialists in detecting electrical activity and abnormal function of the retina.

The *ERG* machine will be a valuable asset in the clinic, consisting of two components Multifocal and Full field Tests. The *ERG* provides trivial diagnostic information in a range of retinal diseases. It can be also used for monitoring toxicity of various drugs, such as Plaquenil. We believe that the *ERG* will be of great benefit and will provide enhanced care to our patients in the community.





## News from the Department of Ophthalmology & Visual Sciences



### Staff Insight



Priya Janardhana, M.D.

### **Educational Lecture Series**

The UMass Memorial Eye Center Lecture Series is a new program for technicians and ancillary ophthalmic personnel, held every 4th Friday of the month from 8:00 – 9:00 AM at the Hahnemann campus. Ophthalmology faculty members rotate in presenting to the staff.

Topics include common eye diseases, etiology, classification, diagnosis, and management. For more information please email us at: [eyedoctors@umassmed.edu](mailto:eyedoctors@umassmed.edu)

### **UMass Ophthalmology Physicians and Technicians head to NEOS**



Katlyn Champagne (left) & Stacey Lewis

On Friday September 30th, 2016, several members of the Department of Ophthalmology & Visual Sciences, headed to Boston for the New England Ophthalmological Society's 27th annual meeting.

While the Dr. Shlomit Schaal, Chair and Dr. George Asdourian (Director of Education) attended a full day's lecture, Stacey Lewis, COA and Katlyn Champagne, an ophthalmic photographer, heard an array of speakers covering many topics to expand their knowledge.

The day began with a talk by Darrin Landry, CRA, OCT-C, titled "OCT Angiography: The Next Frontier", wherein the technicians got a sneak peek into the exciting world of OCT angiography.

With UMass now having an OCT Angiography machine, the technicians were excited to see the many different examples of how OCT Angiography will be the next frontier in diagnosing and treating different pathologies in the eye. For many years fluorescein angiography has been the gold star standard, but with OCT angiography you will be able to go deeper and gather more information than ever before. It was an exciting day for Stacey and Katlyn, who felt very lucky to have been a part of it.



## News from the Department of Ophthalmology & Visual Sciences



### Student Insight



Ian Beganski

#### LEAN Project

LEAN is about maximizing the patient and staff experience by eliminating waste and adding more value. Lean was first used in the manufacturing world, most notably by Toyota. Ian Beganski worked for CITC as a Career Path Intern during the summer.

He has been involved in Lean Improvement since high school. At present, Ian is studying for a bachelor's degree in Healthcare Administration at Rhode Island College. Ian has been collecting data in the Eye Center during the summer months, to identify opportunities to improve patient flow and to optimize patient care.

UMass Memorial Healthcare uses Lean thinking and problem solving for better staff training and education. The goal of this project is to accurately and objectively reflect the current situation and find areas of improvement.



Nisarg Chhaya

#### Ophthalmology Student Interest Group (OSIG)

The Ophthalmology Student Interest Group (OSIG) is a new interest group that was established in August 2016, for the benefit of students of the University of Massachusetts Medical School who are interested in the field of Ophthalmology. Its mission is to foster interest in the field of Ophthalmology through both didactics, as well as hands-on experiences.

The OSIG meets monthly to discuss the general field of Ophthalmology, subspecialty fields, research, and residency application process. OSIG also schedules skills sessions in which students dissect pigs' eyes, learn how to use a direct and indirect ophthalmoscope, as well as learn how to perform a slit-lamp examination.

The OSIG was able to make close, personal connections with the UMass Department of Ophthalmology & Visual Sciences physicians, who provide excellent support and serve as role models. These close connections combined with immersive, and diverse experiences our students have encountered, make OSIG a unique opportunity for those interested in the growing field of Ophthalmology. For students who may be interested in joining the OSIG, please contact Nisarg Chhaya via email: [Nisarg.Chhaya@umassmed.edu](mailto:Nisarg.Chhaya@umassmed.edu)



## News from the Department of Ophthalmology & Visual Sciences

### Educational Insight



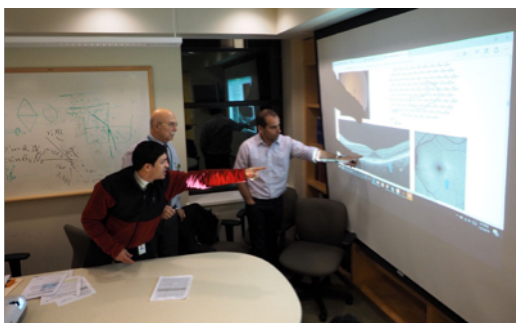
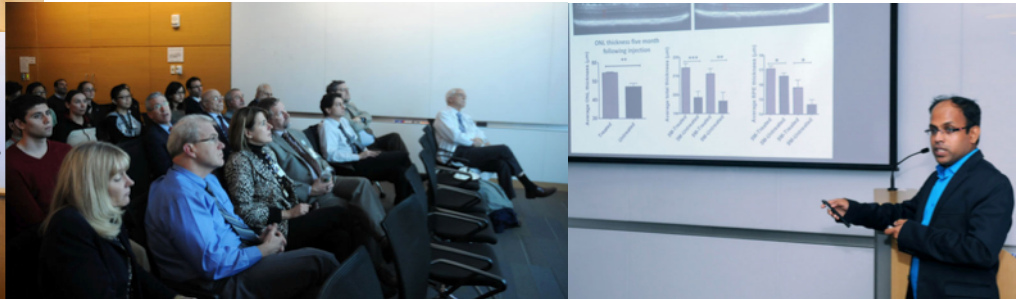
#### **Vision Seminar Series**

The Department of Ophthalmology & Visual Sciences at the University of Massachusetts Medical School, launched a new Vision Seminar Series that is open to the public, and invites practicing Ophthalmologists from the greater Worcester area, to share their experiences and knowledge with scientists and clinicians of the Department of Ophthalmology.



The goal of the seminar series is to exchange knowledge and foster collaborations between scientists and clinicians in order to drive research forward that promotes better long-term patient care. The seminar Series will take place every 3rd Thursday of the month starting at 5.30 pm. Please email us at:

[eyedoctors@umassmed.edu](mailto:eyedoctors@umassmed.edu)



#### **Journal Club**

The Department of Ophthalmology & Visual Science is holding a Monthly Journal Club, every second Thursday of the month at 5:15 PM at the Hahnemann campus. Pertinent articles from various Ophthalmology sub-specialties are discussed by faculty members.

The Monthly Journal Club is open to residents, fellows, medical students, and community physicians. For more information

please visit us at: <http://www.umassmed.edu/ophthalmology/>





## News from the Department of Ophthalmology & Visual Sciences



### National Insight

#### **Dr. Shlomit Schaal led the retina poster tour at the American Academy of Ophthalmology**

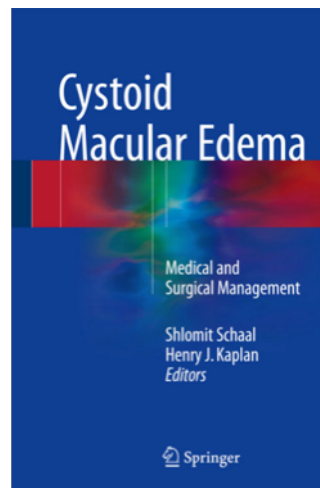
Dr. Shlomit Schaal led the retina poster tour at the American Academy of Ophthalmology Annual International Meeting in Chicago, IL. Together with Dr. Pauline Merrill, from Rush University, Dr. Schaal led a group of Ophthalmologists from all over the world, in a scientific tour that highlighted the recent and most notable advancements in the field of retina.

The American Academy of Ophthalmology (AAO), is a professional medical association of Ophthalmologists. Its membership of 32,000 medical doctors includes more than 90 percent of practicing Ophthalmologists in the United States, as well as over 7,000 international members.

Dr. Schaal is an active member of the AAO program committee, and served in different roles during the annual meeting, including session moderator, scientific paper senior author, and session panelist.



#### **New Book Published: Cystoid Macular Edema – Medical and Surgical Management**



The publishing company Springer has announced that a new book edited by Dr. Shlomit Schaal and Dr. Henry Kaplan has been published.

Written for comprehensive Ophthalmologists and vitreoretinal surgeons, this book discusses state-of-the-art medical and surgical management of cystoid macular edema (CME).

CME is one of the most common blinding conditions because it is the common final result of several eye diseases, including diabetic retinopathy, age-related macular degeneration, inflammatory eye conditions, and vascular occlusions.

The book discusses and explains the current understanding of the pathophysiology of the condition and methods of diagnosis. Drs. Schaal and Kaplan have delivered a series of scientific educational courses focused on the medical and surgical management of cystoid macular edema at international conferences, such as the American Academy of Ophthalmology (AAO), World Ophthalmology Congress (WOC), and the American Society of Retina Specialists (ASRS).



## News from the Department of Ophthalmology & Visual Sciences



### Community Insight



#### **Local Ophthalmologists invited to a “Meet and Greet” Reception at the Beechwood Hotel**

The UMass Department of Ophthalmology & Visual Sciences invited community Ophthalmologists of the greater Worcester area to a reception, on November 10<sup>th</sup>, at the Beechwood Hotel.

The evening started with a welcome speech from the Chairman of the Department, Dr. Shlomit Schaal to the attendees. Doctors then briefly introduced themselves to the crowd. The purpose of this initiative was to create opportunities in which Ophthalmologists can collaborate in both clinical and research projects.

We believe that bringing community physicians together, will create a platform in which new ideas can be transformed into reality and will better serve our community.

*Happy Holidays*



Find us online for the latest, research, publications, faculty updates & more

<http://www.umassmed.edu/ophthalmology/>

*UMass Department of Ophthalmology & Visual Sciences*