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Insight from the Medical Group President

It is with great admiration and pride that I have watched the growth and success of the Department of Ophthalmology and the UMassMemorial Eye Center over the past couple of years. A new dynamism and energy has been instilled which, I believe is directly attributable to the influence of Dr. Shlomit Schaal, the Chair of the Department of Ophthalmology and Visual Sciences. Of course, the advances and improvements that have been made have also required the enthusiastic commitment of the team, which consists of staff ophthalmologists, technicians and support staff who work in the Eye Center.



The ophthalmology team described above has dramatically improved access, quality and service for our patients. Using Lean thinking and process redesign, a new model of care which includes open access clinics and outreach to the community in our Northborough Crossing office has been developed, and as a result, wait times have been virtually eliminated. New staff, including an oculoplastic surgeon and an optometrist have been added and new state of the art equipment has been purchased and is now in daily use in the eye clinic. How do I know this is working? I know because I have been a patient in our Eye Clinic and I have had the opportunity to experience these improvements first hand. Congratulations to Dr. Schaal and the Eye Team, for the "eye opening" improvements that have been made in such a short period of time.

Stephen E. Tosi, MD, Sr. Vice President/Chief Physician, Executive Chief Medical Officer, UMMHC, President UMass Memorial Medical Group



From the Chair



Dear Colleagues and Friends,

I am delighted to invite you to read the 2018 spring edition of UMass Insight. In this issue, we are pleased to share with you the exciting news from the Eye Team. We are delighted to announce two new Eye Clinic locations: the new Eye Clinic at the Ambulatory Care Center (ACC) at University Campus, and the new community Eye Clinic at Northborough Crossing. At these new and convenient locations, our patients can get better access to quality eye care. We also proudly highlight being granted the Innovators of the Year Award, as one of the best teams to apply the idea board system at UMass Memorial Healthcare. Our progress in education and in our research mission is showcased in this issue, as we continue to make a difference for both our patients and our students. I am incredibly proud of all our faculty and staff who are working hard every day to continue to drive positive changes and continuous progress. I would like to thank all of you for your support of the Eye Center. Happy Spring!

Shlomit Schaal, MD, PhD

Professor and Department Chair



Faculty Insight

Dr. Priya Janardhana

Priya Janardhana, MD, is the Director of the Uveitis Service. She completed her residency in Ophthalmology at Boston University in Boston, MA, followed by a fellowship in Uveitis and Medical Cornea at the F.I. Proctor Foundation at UCSF, San Francisco, CA.

Dr. Janardhana specializes in the treatment of ocular inflammation associated with systemic diseases. She treats a wide range of ocular inflammatory diseases including uveitis due to infectious causes – syphilis, tuberculosis, auto-immune causes – Sarcoid, Sjogrens, Behcets, HLA-B27, rheumatoid arthritis, ocular cicatricial pemphigoid, Steven-Johnson syndrome, graft vs. host disease.

In addition to this, Dr. Janardhana served as the EPIC Physician Champion for the Department of Ophthalmology & Visual Sciences for the past two years and was instrumental in the design and implementation of EPIC Kaleidoscope in the department. She is happy to see that the transition from paper chart to the new electronic medical system went smoothly and hopes that EPIC will continue to enhance efficient patient care at UMass.





News from the Department of Ophthalmology & Visual Sciences



Clinical Insight

New Diabetic Eye Exam Service at the ACC

Diabetic retinopathy is the leading cause of blindness in working age adults in the US. The American Academy of Ophthalmology (AAO) guidelines recommend that all patients with diabetes have an eye exam annually. However, eye screening rate



among diabetic patients remains as low as 30% nationally, and patients referred for diabetic eye exams frequently fail to keep those appointments. In collaboration with the Diabetes Center of Excellence (DCOE), UMass Memorial Eye Center has initiated and implemented a novel diabetic eye disease screening service at the Ambulatory Care Center (ACC), aiming to increase the access to diabetic eye screening rate, and to allow early detection and prevention of diabetes-related vision loss.

Dr. Juan Ding (pictured right) and technician **Manisha Anand** (pictured left) currently work at the ACC to provide convenient same-day walk-in diabetic eye screening service on the 5th floor. Diabetic patients are offered same day eye exam right after their regular diabetes appointment. Since the beginning of the year, more than 300 patients have used this service, and about a third of them had diabetic retinopathy, cataracts, and/or glaucoma.

Dr. Ding: "Patients are very happy about this new service. Many of those unwilling to travel elsewhere for eye exams finally are having eye exams at the ACC. We strive to continue to develop this service to provide daily eye exams at the ACC."

NEW Eye Clinic Now Open at Northborough Crossing

On April 2nd, Dr. Schaal announced a new additional location for the UMass Eye Center. "I am happy to announce that we have opened this week another location for UMass Memorial Eye Center. The new clinic has state of the art equipment and is conveniently located at the Northborough Crossing Medical Group site. There is free parking and an option for a same-day appointment."



Dr. Schaal mentioned that the new location will be more convenient to many patients who live east of Lake Quinsigamond. The new location offers well eye care and also specialty care, such as: Retina Services, Oculoplastics, Contact Lens Service, and Cataract Evaluation.

Please note our NEW clinic location at Northborough Crossing:
333 SW Cutoff, Northborough, MA 01532
Phone: (774) 570-5000



News from the Department of Ophthalmology & Visual Sciences



Staff Insight

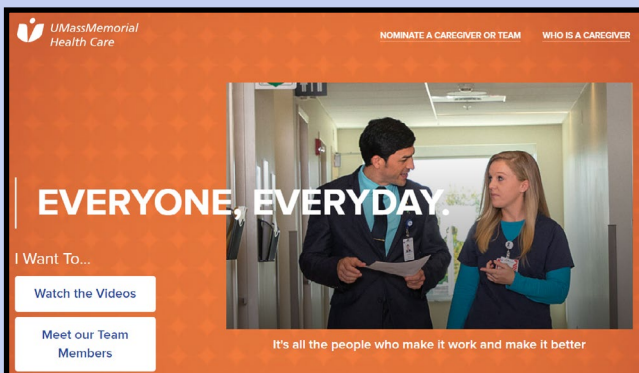
The Transformation of Our Technician, Jason McTigue

Hello everyone, my name is **Jason McTigue**. I have been working at UMass Memorial Healthcare Eye Center for almost three years now as a Certified Ophthalmic Assistant. Before my journey with UMass, I worked in Boston for a large well known Medical Center. My work in ophthalmology is one I have yet to regret and I have been at this for a little over six years now. My experience is in various specialties including retina, glaucoma, cornea, pediatrics and neuro-ophthalmology. I am currently studying to become a Certified Ophthalmic Technician, the next level for ophthalmic certification. I also want to learn some more difficult technical skills such as ophthalmic ultrasound, this will help with the next level of certification.

I really enjoy working with patients at UMass because patients are so appreciative of our care. We are the only hospital based practice in Worcester, and the Eye Center is rapidly expanding. The Eye Center added new lanes of equipment with newly added 55" monitors to help educate our patients. We have opened an office at Northboro Crossing, as well as the ACC building. I look forward to our continued growth and expansion, as we add new providers and locations to become the best place for ophthalmic care in the city!

In my spare time I enjoy watching movies and playing video games. I own a motorcycle which is my favorite mode of transportation especially when it is nice out.

As many of you know, I had very long hair until recently. I had it cut in the beginning of March (14 inches!!!), and will be donating it to pediatric cancer, so children can have wigs made for them while they undergo treatment. Being sick is awful, so if I can bring a slight sense of normalcy to a child's life, then it will have been worth the 3 years of constant shampooing and neck pain!



Eye Center Featured on Everyone, Everyday Campaign

The Eye Center was featured on the UMass Memorial Healthcare's "Everyone, Everyday." Campaign, which highlights teams that have increased their efficiency. By better utilizing existing resources and by implementing a series of the staffs' original ideas, patient volume doubled at the Eye Center within one year, while wait times significantly decreased.



Understanding the Current Online Representation of Academic Ophthalmology - Hot Topic at ARVO 2018 Annual Meeting

Tedi Begaj is currently a 1st year Transitional Year Resident at Cambridge Health Alliance and will be heading to the Massachusetts Eye and Ear- Harvard Medical School Ophthalmology Residency Program this upcoming summer. He graduated from UMass Medical School in 2017 where he received an excellent foundation in medical education as well as opportunities to pursue basic and clinical research.

In collaboration with Dr. Shlomit Schaal and her colleagues, Dr. Omar Helmy and Samuel Leeman, Tedi focused on understanding the current online representation of academic ophthalmology. His group investigated one hundred and seventeen U.S. academic ophthalmology institutions, and subsequently analyzed the online content of each website from the viewpoint of a myriad of users (patients as well as trainees, clinicians and researchers). His work revealed that although the majority of websites provide a basic core of information, further work is necessary to enhance content as well as target accessibility. It is anticipated that these findings may be used by academic ophthalmology institutions to improve their website design and online content. This work was presented at the ARVO annual meeting in Hawaii in May 2018, and won the "Hot Topic" award.



Eye Center Team Wins the Innovators of the Year Award

On December 15, 2017, the UMass Memorial senior leadership team announced the 2017 Innovators of the Year Award recipients. This award recognizes teams from across the health care system for their outstanding contributions in achieving True North goals by successfully implementing caregiver ideas. This year's selection process was extremely competitive and it was announced that there has been an unprecedented three-way tie for this year's top spot. The three top winning teams were: UMass Memorial Health Care: Information Services' Desktop Services, UMass Memorial



Dr. Schaal credits the Eye Team members for their many original ideas that were successfully implemented this year.

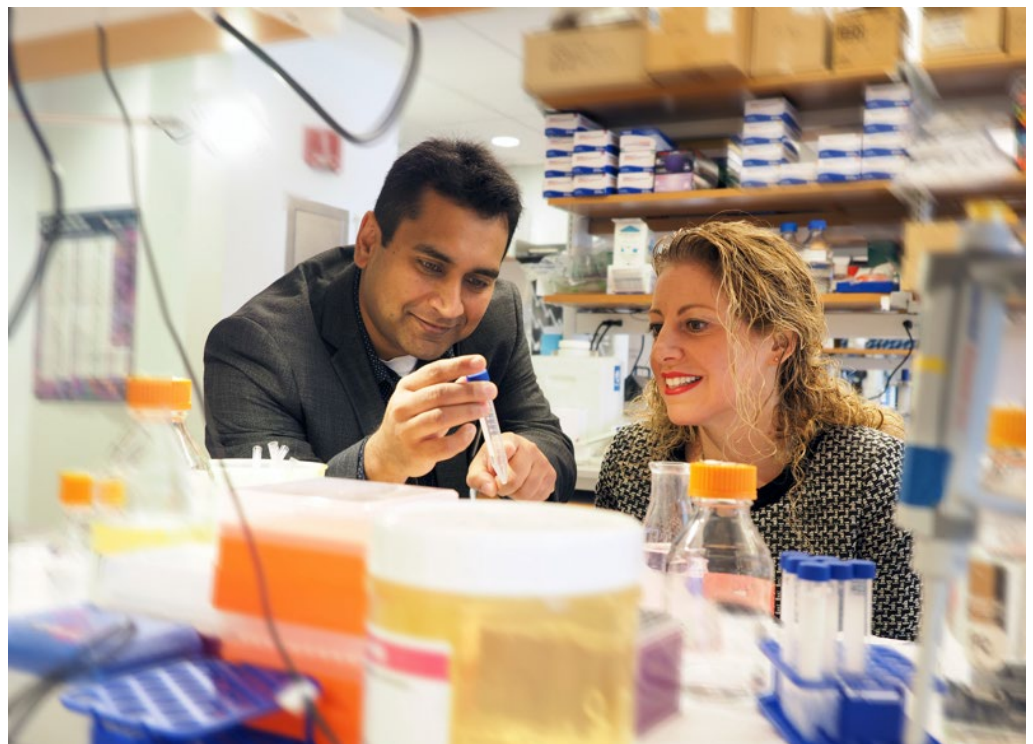
Medical Center: 6 East, and UMass Memorial Medical Center: Eye Center! Dr. Eric Dickson, CEO of UMass Memorial said: "I would like to congratulate all the teams nominated for the Innovators of the Year Award. It's your fantastic work that inspires all of us at UMass Memorial Health Care to "think outside of the box" and continually innovate on behalf of our patients and community of caregivers".



Department of Ophthalmology & Visual Sciences and Horae Gene Therapy Center to Work on Developing Novel Gene Therapy Programs for Retinal Degenerative Diseases

Inherited diseases are caused by alterations in the DNA sequence of the causative genes. Unfortunately, in such diseases, conventional methods, prophylactics and surgeries, can only offer transient protection. Gene therapy is a longer-lasting and efficient strategy by which the correct copy of the defective gene is delivered to the target cell. **Dr. Guangping Gao** (Director, Horae Gene Therapy Center) and **Dr. Hemant Khanna** (Associate Professor, Department of Ophthalmology & Visual Sciences and Horae Gene Therapy Center) have signed a series of sponsored research agreements with Ophthotech to utilize innovative gene therapy approaches for the treatment of severe inherited retinal degenerative diseases, including Leber congenital amaurosis (LCA10; CEP290) and Stargardt Disease. The groups will also work on developing novel gene delivery strategies by constructing novel retinal gene therapy vectors that act as gene delivery vehicles.

Gene therapy involves the delivery of the correct copy of the gene (that acts as cargo) using Adeno-associated viral (AAV) vectors as delivery vehicles. These vehicles are relatively safer and specific to retinal cells. However, they have a cargo



size limit. Hence, the genes that exceed this limit cannot be delivered using the AAVs. As part of the research agreements, Drs. Gao and Khanna will tackle this roadblock by using "minigenes" as cargos. These minigenes are shortened yet functional forms of large genes that are within the carrying capacity of the AAVs. Research on this innovative strategy was recently described by Khanna and colleagues in the journal *Human Gene Therapy*, "Gene Therapy Using a miniCEP290 Fragment Delays Photoreceptor Degeneration in a Mouse Model of Leber Congenital Amaurosis" (<https://www.liebertpub.com/doi/10.1089/hum.2017.049>).



News from the Department of Ophthalmology & Visual Sciences



Community Insight

Dr. Eric Dickson, UMass Memorial Health Care President and Chief Executive Officer, Hosts Innovators of the Year Dinner

Dr. Eric Dickson invited the members of the Eye Team for a special dinner to celebrate their winning of the Innovators of the Year Award. The award is given annually to the team that best utilized the idea board system to allow process improvement. Dr. Dickson said: "I am proud of the Eye Team for making such significant improvements over the past year. You serve as an example for the entire healthcare system, that great results can be achieved without additional space, personnel, or resources. The service you provide to our patients is through the roof". Dr. Jeff Smith, Interim President of UMass Memorial, said: "I brag about the Eye Team in every lecture I give.

You became my favorite example of team work that yields results". Dr. Schaal thanked all the members of the team for their bright original ideas that helped drive success. She promised to strive to win the Innovators of the Year Award every year. Darlene Bocash-Winn, the Eye Center manager, said she loved leading the Eye Team through every day challenges. Carrie Morton, certified technician, said: "we are a big family", and Jackie Volke, the Eye Center's secretary for the past 21 years summarized the success story best: "The Eyes Have It".





News from the Department of Ophthalmology & Visual Sciences



UMass Memorial Insight

The Eye Team Thanks President Patrick Muldoon for his Leadership

The last visitor of the day to the Eye Center on January 31st, was a very special person, the president of the academic medical center, Mr. Patrick Muldoon, FACHE, who retired from his position on that day. Mr. Muldoon is admired and loved by the entire Eye Team for his personality and deeply caring style of leadership. He took the time to visit the Eye Team during two recent departmental retreats and shared some of his insights regarding goals of the UMass Medical Center towards the year 2020.

The Eye Team congratulated Mr. Muldoon with warmest wishes for his retirement, and thanked him for his service and commitment to the organization. Dr. Schaal, Chair of the Department of Ophthalmology & Visual Sciences said: "President Patrick Muldoon proved himself to be a great supporter of the Eye Center. I am so glad he got to sign the recent agreement that will allow Boston Children's Hospital to provide eye care to children and families here at

the Eye Center at the Hanemnan Campus. This was a long anticipated and meticulously negotiated agreement that was incepted and finalized during Mr. Muldoon's presidency. The Eye Team deeply thanks Patrick for his leadership and his support. Patrick - you will be missed!"



Wishing You a

*Happy
Spring!*

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