



Ophthalmology

LEWIS KATZ SCHOOL OF MEDICINE AT TEMPLE UNIVERSITY DEPARTMENT OF OPHTHALMOLOGY NEWSLETTER

MESSAGE FROM THE CHAIR

Sustainability

“Your cotton tote is pretty much the worst replacement for a plastic bag.”
Wait, what did I say?

Yes, that is what the article I read online argued. Based on a study out of Denmark, it turns out that plastic bags are in some ways better than cotton, or even paper. How can this be?

Well there are two factors to consider. First, what is the effect of the bag on trash. And second, what is the energy required to make the bag?

It turns out that from a trash perspective, plastic is a problem. We all know that. Cotton and paper win. But it also turns out that from a manufacturing perspective, making cotton bags—and even paper bags—is very energy and resource intensive because of the farming, harvesting, and energy needed to create the bag. It takes more resources to make either a cotton or paper bag than making a plastic one. The same thing is true of electric cars. The huge emissions savings of EVs is wonderful, but the manufacture of the EV requires a lot of energy to make the car and the battery, to say nothing of the destruction caused by lithium mining. And if the energy required to make the battery is coming from burning coal, then that’s a problem. This is currently happening as China makes more than 50% of EV batteries, and their manufacturing electricity is frequently obtained from burning coal. It’s the same thing to a lesser degree if you plug your EV in to the grid at home if your electricity is not coming from a clean source. It’s complicated, but at the end of the day, when you consider all that goes into making a shopping bag, plastic is in some ways better than other options. Surprising!

What about in ophthalmology?

I’ve heard people say we should use disposable scrubs. Disposable scrubs? Doesn’t that make waste versus reusable cotton scrubs? Well, it depends on the energy source to heat the laundry water, the soap

and then there is that whole cotton farming thing. There is a big push now to allow reusable dilating drop bottles to be reused until their expiration date instead of thrown away after a month like The Joint Commission says. We at Temple are pushing ahead to adopt the guidelines of the 2022 joint AAO/ASCRS/OOSS position paper to allow multiuse bottles to—wait for it now—to be used for their full shelf life. I know, it’s insanity! But the theme here is sustainability.

This reminds me of another effort that we have been undertaking in the past couple years. In 2022, I told you how we had just had a difficult year and needed to change some things in our residency. Last year was the second year of a two-year process of taking a careful look at how we were structuring our program. We realized we needed to improve. But what should we improve? Some things were obvious, like the OKAP scores. Some things were not so obvious, like how we were scheduling patients in the clinic. With input from the residents, staff, and faculty, we decided to make several changes.

We identified several aims, many revolving around patient flow in the clinic and better ways to educate residents. We considered the systems that would be affected—namely the clinic and the resident education curriculum. Then we assembled a team consisting of our practice administrator, our office manager, the residents and the attendings. Finally, we were led by our former Program Director, Dr. Upneet Bains.

We made quite a few changes. From Friday afternoon education sessions to afternoon wet lab, to the return of resident choice day, to review questions in our lectures, to recruiting new faculty, to changing the OKAP prep process, to getting residents more involved in research projects, to redesigning how we structure the resident clinic, we put in some real efforts to hopefully improve the educational program.

How did it work out?

Well, over the past year we’ve had a chance to see if our changes resulted in any sort of meaningful improvements. Based on feedback from the resident program survey, staff, and faculty, it appears that things in the clinic are going better. Yes, there is one faculty member who is having trouble adapting to change (guess who?) but he’s an outlier. Of equal importance is that the residents improved their standardized test scores this year by quite a bit, which hopefully means that the curriculum changes have made a difference.

But can we sustain it? We have worked to build the infrastructure that will allow future residency classes to succeed, and we have an amazing group of residents, led by Chief Resident Tony Thieu, who are dedicated to the process. But I must acknowledge the previous two classes of residents who worked with the faculty to help us start something special. As hard workers and as role models for the younger residents, our previous graduates have been an essential part of improving the residency by leading by example.

We all know that sustainability will be the key for our future. Building something that improves resident education and figuring out how to reduce our burden on the planet might seem unrelated, but to me they are simply different aspects of the same concept. I am so proud to work with such amazing staff, residents and faculty who are committed to bringing the best to this residency and beyond!



JEFFREY D. HENDERER, MD

Professor of Ophthalmology
Dr. Edward Hagop Bedrossian
Chair of Ophthalmology
Chief Medical Officer of Ambulatory Practices,
Temple Faculty Physicians Plan, Inc.
jeffrey.henderer@temple.edu



Hungry for a need to connect, inter-class comradery and socialization is blossoming within the department.

Resident “Call Room”

Thoughts from Tony Thieu, MD, PGY-4, Chief Resident

My class was the COVID class, we graduated with no match day, no graduation ceremony. We were thrown into the second wave of the pandemic and directly into intensive care units. My junior residents didn't have it any easier. They went through their clinical years as medical students with ventilator and end-of-life discussions front and center in their education. Widespread healthcare worker burnout was rampant.

Coming to Temple after internship as a first year, it was clear that everyone was holding on to structure worn thin by the pandemic and doing their best to stay optimistic given the circumstances. Social distancing limited us as residents from bonding. Virtual lectures were a barrier to organic conversations that typically developed between residents and attendings. There was a sense of isolation.

With the easing of COVID in my second year, we welcomed our first full class of integrated interns as well as new first-year residents. With more helping hands, the burden of the dreaded daytime consult phone was now shared amongst two classes. This freed time allowed our incoming classes to focus on learning more effectively in clinic and also afforded seniors and attendings more time dedicated to teaching. Mindsets began to shift toward reorganizing and

exploring what had been lost in institutional memory. Hungry for a need to connect, inter-class comradery and socialization blossomed. We saw the re-emergence of journal clubs at attendings' homes, outings to the ballpark, and spontaneous get-togethers that brought us closer together.

As Temple residents and alumni, we share a unique bond grounded in our experiences working side-by-side tackling the challenges of caring for our patients in North Philadelphia and Delaware. Our experience is also inseparable from the friendships we form going through it. This is the core of our residency experience that we carry with us. With the pandemic behind us, I believe we are now in the midst of a cultural renaissance driven by residents eager to improve upon the Temple experience both during and beyond residency.

As I look toward my final year, I wonder how I'll manage to stay connected to my colleagues as I move beyond Temple. What can I learn from those that came before me? As a soon-to-be alumnus, what ways can I continue to give back? Recently, there has been active interest among current and former residents on how to stay connected beyond graduation. I look forward to engaging with alumni to answer these questions and to explore how we can develop avenues to continue bringing us closer together.



Welcome New Interns



HANNAH LEVIN, MD

Hometown: Berwyn, PA
Undergraduate School: Tufts University
Medical School: Sidney Kimmel Medical College at Thomas Jefferson University

Hannah Levin hails from Berwyn, PA. She earned her undergraduate degree from Tufts University, where she majored in cognitive brain science, and earned her medical degree from the Sidney Kimmel Medical College at Thomas Jefferson University. She is completing post-graduate training at Temple University Hospital. In her free time, she enjoys hiking, biking, reading, and spending time with family and friends.



OLIVIA TAYLOR, MD

Hometown: Lewes, DE
Undergraduate School: University of Richmond
Medical School: Sidney Kimmel Medical College at Thomas Jefferson University

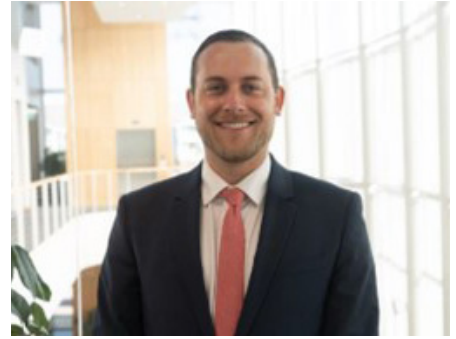
Delaware (Lewes) native Olivia Taylor earned her undergraduate degree from the University of Richmond, where she majored in biology, and earned her medical degree from the Sidney Kimmel Medical College at Thomas Jefferson University. She is completing post-graduate training at Temple University Hospital. Olivia enjoys water color painting, game show reality TV (specifically the Great British Baking Show and Survivor), concerts, dancing, and all things indoor plants.



CHRISTOPHER ZHU, MD

Hometown: San Antonio, TX
Undergraduate School: University of Texas San Antonio
Medical School: University of Texas San Antonio

Christopher Zhu chose to travel north to Temple University Hospital for his post-graduate training. Originally from San Antonio, TX, Christopher attended the University of Texas San Antonio where he earned both his Bachelor of Science in biology and medical degree. He enjoys reading and writing modern poetry, fitness, figure skating, skiing, running, tennis, international films, and classical music.



Brian Shafer, MD

Welcome Dr. Brian Shafer

Brian Shafer, MD, has joined Temple Ophthalmology faculty part time as a Cornea and Glaucoma Specialist. Dr. Shafer went to the University of Rochester where he graduated Magna Cum Laude with a Bachelor of Science in Molecular Genetics. After college, he returned home to Philadelphia to complete medical school at Temple University School of Medicine. He spent a year at the historic Pennsylvania Hospital doing Internal Medicine before completing his residency at the University of Pennsylvania, Scheie Eye Institute. Following his residency, Dr. Shafer spent an extra year of fellowship in Cornea, Refractive, Glaucoma, and Complex Cataract Surgery at Vance Thompson Vision in Sioux Falls, South Dakota. Dr. Shafer then spent two years working in Chester County, PA, before opening Shafer Vision Institute in Plymouth Meeting.

Dr. Shafer is nationally recognized as an expert in cataract surgery technology, partial thickness corneal transplants, drug delivery for glaucoma, and laser vision correction (LASIK). He is passionate about ophthalmology, and the only thing he loves more is his family (his wife, Morgan, is a veterinarian in Philadelphia). Together, they have a son Devin, three cats, and a Mexican Hairless dog. Dr. Shafer is an avid gardener who also spends as much of his free time as possible fishing with his dad.



Celebrating Recent Resident Graduates

DANIJEL J. PERICIC, MD, (pictured left) has begun a fellowship at the Wills Eye Hospital, specializing in Neuro-Ophthalmology. **JAMES P. MURPHY, MD**, (pictured center) has begun a fellowship at University of Maryland, specializing in Glaucoma. He plans to join Temple Ophthalmology upon completion of his fellowship. **JACK D. LEMON, MD**, (pictured right), has begun a fellowship at UCLA Stein Eye and Doheny Eye Institutes, specializing in Medical Retina. We wish all our graduates much success in their endeavors!

PUBLICATIONS & POSTER PRESENTATIONS

PUBLICATIONS

Mokhashi, N., **Grachevskaya, J.**, **Cheng, L.**, Yu, D., Lu, X., **Zhang, Y.**, & **Henderer, J. D.** (2022). A Comparison of Artificial Intelligence and Human Diabetic Retinal Image Interpretation in an Urban Health System. *Journal of diabetes science and technology*, 16(4), 1003–1007.

Shyu, A. P., & **Krakauer, M.** (2022). Bilayer Tegaderm™ Moisture Chamber. *Ophthalmic plastic and reconstructive surgery*, 38(4), 408.

Krakauer, M., Jennings, E., Gupta, L., Si, Z., Yu, D., Lu, X., Prendes, M. A., & Shah, H. (2023). A comparison of primary and secondary eye removal after open globe injury: A multi-centre study. *Eye (London, England)*, 37(6), 1249–1253.

Mokhashi N, **Grachevskaya J**, **Cheng L**, Yu D, Lu X, **Zhang Y**, **Henderer JD**. A Comparison of Artificial Intelligence and Human Diabetic Retinal Image Interpretation in an Urban Health System. *J Diabetes Sci Technol*. 2022 Jul; 16(4); 1003-1007. PMID: 33719599

Salowe RJ, Lee R, Zenebe-Gete S, Vaughn M, Gudiseva HV, Pistilli M, Kikut A, Becker E, Collins DW, He J, Merriam S, Mulvihill K, Laberee N, Lomax-Reese S, Murphy W, **Henderer J**, Chavali VRM, Cui QN, Ross AG, Addis V, Sankar PS, Miller-Ellis E, Maguire MG, O'Brien JM.

Recruitment strategies and lessons learned from a large genetic study of African Americans. *PLoS Glob Public Health*. 2022;2(8):e0000416. Epub 2022 Aug 5. PMID: 36743904

Tyler Najac; Christina Nelson; Shyla McMurty; Amanda Luong; Jesse Cheung; **Lorrie Cheng**; **Julia Grachevskaya**; **Oleg Shum**; **Sherona Tillmon**; **Jeffrey D Henderer**; **Yi Zhang**. Identifying Causes of Ungradable Fundus Photos in an Artificial Intelligence Assisted Screening Program for Diabetic Retinopathy. *Invest. Ophthalmol. Vis. Sci.*, 2023; 64(8):228.

Robert Matthew Abishek; Paula Ko; Tomilade Adepoju; **Jeffrey D Henderer**. Christiana Care Health System (CCHS) Diabetic Retinopathy Screening: An Evaluation of an Ongoing Project. *Invest. Ophthalmol. Vis. Sci.* 2023; 64(8):2273.

Amanda Luong; Jesse Cheung; Shyla McMurty; Christina Nelson; Tyler Najac; Stephen Aronoff; **Yi Zhang**; **Jeffrey D Henderer**. Comparison of Machine Learning Models to a Simple Product Predictor to Identify Patients at Risk for Diabetic Retinopathy. *Invest. Ophthalmol. Vis. Sci.*, 2023; 64(8):2679.

Jesse Cheung; Amanda Luong; Shyla McMurty; Christina Nelson; Tyler Najac; Stephen Aronoff; **Yi Zhang**; **Jeffrey D Henderer**. Validation of

Machine Learning Models and Comparison to a Simple Product Predictor (PP) to Identify Patients with Diabetes at Risk for Retinopathy. *Invest. Ophthalmol. Vis. Sci.*, 2023; 64(8):2678.

Christina Nelson; Tyler Najac; Amanda Luong; Jesse Cheung; Shyla McMurty; **Lorrie Cheng**; **Julia Grachevskaya**; **Sherona Tillmon**; **Oleg Shum**; **Jeffrey D Henderer**; **Yi Zhang**. Evaluating Follow-Up Metrics in an AI-Assisted Telemedicine Screening Program for Diabetic Retinopathy in Primary Care Clinics After Hiring a Patient Care Navigator. *Invest. Ophthalmol. Vis. Sci.* 2023; 64(8):2274

PRESENTATIONS

Jeffrey D. Henderer, April 27, 2023
PAO lecture series "Practice management"

Jeffrey D. Henderer, April 26, 2023
Capstone lecture for the Lewis Katz School of Medicine students about personal finance.

Lin, S. C., Giang, A., Liu, G. T., Avery, R. A., Shindler, K. S., Hamedani, A. G., Ross, A. G., & Tamhankar, M. A. (2023). Frequency and Etiologies of Visual Disturbance After Cataract Surgery Identified in Neuro-Ophthalmology Clinics. *Journal of neuro-ophthalmology: the official journal of the North American Neuro-Ophthalmology Society*



A Note of Gratitude

Thank you to **UPNEET BAINS, MD** for serving as Temple Ophthalmology Residency Program Director from July 2021 through June 2023.

Thank You to Our Recent Donors

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Departmental Outing



**PHILADELPHIA PHILLIES
BASEBALL GAME**
Monday, August 21, 2023

Send us your news! Please contact Sherona Tillmon via email at Sherona.tillmon@tuhs.temple.edu.

Save the date!

AAO ALUMNI RECEPTION

Saturday, November 4, 2023

6 – 8 PM

St. Regis San Francisco
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