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Legacy Devers: Global recognition, local commitment

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our community.

By James T. Rosenbaum, M.D., Chief of Ophthalmology



James T. Rosenbaum, M.D.

Welcome to the first issue of The Vision, our semi-annual newsletter to inform patients, colleagues and staff about one of the most remarkable eye institutes in the world. How can I make this claim? Devers is internationally renowned for the work our physicians

do in the areas of glaucoma, cornea, uveitis and retinal disease, but is also wholly commit-

ted to the care of the neediest patients here in Portland.

Glaucoma is one of the leading causes of blindness. In an era in which roughly 90 percent of detailed applications to the National Institutes of Health (NIH) are unsuccessful, Devers has six distinguished scientists who are funded by the NIH and who direct post-doctoral scholars

and other researchers in the study of glaucoma. This resulted in Devers recently ranking first in the world by the Institute for Scientific Information. The ranking was earned for publications on the structural biology of the eye. This funding from the NIH also resulted in Devers scientists presenting 45 abstracts at a recent international meeting for eye researchers.

The cornea is transplanted more than any other tissue, much more than heart or lung or

kidney. And Legacy Devers' own Mark Terry, M.D., has transformed the methodology for corneal transplantation such that patients are referred to him from all over the world.

My own interest is uveitis. Uveitis is the medical term for inflammation inside the eye, a cause of visual loss comparable to diabetes or macular degeneration. In 2012, the International Uveitis Study Group Foundation awarded me its gold medal, a prize given once every four years to a single individual for lifetime achievement in

uveitis care and research.

Retinal disease like macular degeneration is growing increasingly common as our society achieves greater longevity. In 2013, we hired two well-trained retinal physicianscientists, each of whom had received several other job offers from U.S. medical schools.

And I doubt that there are other eye centers in the United States that devote so much of their endowment for the care of the underinsured.

We have named our newsletter The Vision. It refers, of course, to the eye health of our patients. But it also refers to what we at Legacy Devers believe can be the future of ophthalmic care. We are especially grateful to our donors who have embraced philanthropy to enable Legacy Devers staff to pursue this Vision.



The family connection: Is glaucoma genetic?

Christina Stevens had a strong feeling she would develop glaucoma. Early-onset or juvenile glaucoma is often inherited, and Christina's genetic link was strong: her father, grandmother and uncle all had the condition. Steven Mansberger, M.D., Christina's doctor, agrees, stating "Juvenile glaucoma is usually autosomal dominant, which means that 50 percent of family members will develop glaucoma."

At age 9, Christina had high pressure in her eye, a sign of glaucoma. "Then, one day when I was about 17, I was driving home from the beach," she recalls, "and everything turned bright and I saw rainbows around the lights."

Her father, David Gattman, knew the experience well. David underwent two glaucoma surgeries in his 20s by E. Michael Van Buskirk, M.D., who was internationally known for his work in glaucoma at Legacy Devers. David's mother, Christina's grandmother, also had surgery by Dr. Van Buskirk. And his father had also had surgery at Devers. David hasn't had trouble with his eyes since his surgeries.

"Good thing I was aware of the signs," says David.
"[Christina] mentioned she was seeing rainbows. In
my experience, that meant her pressure was spiking.
I got her to Devers for treatment the next day."

Several years after starting treatment, Christina had surgery on her left eye, and a year or two later she had surgery on the right eye. Both surgeries went well. "I feel great now," Christina says. "I am more cautious now than when I was younger, but I also feel confident that my eyes are in good shape now. My eyesight is good. At this point, everything is beautiful, and I am optimistic it will stay that way."

In addition to saving her vision, her experience helped her overcome a common fear. "I have no fear of things being poked in my eye!" says Christina. "I had to have a steroid injection, and my mom was freaking out. But it didn't bother me at all."



Christina Stevens and her father, David Gattman, have both received successful glaucoma surgery at Legacy Devers.

Her case highlights the outstanding care at Legacy Devers Eye Institute and the excellent work of Dr. Mansberger. Devers is a leading institution for the treatment of and research on glaucoma. Dr. Mansberger is one of the leaders of the team.

"Dr. Mansberger, well, I trust him with my life," Christina says. "He is always very honest, straightforward with me. He never tried to sugarcoat things for me. At the same time, he is very, very nice and caring. "When I was hospitalized, he was there at 6 a.m. to check me in. He came on his lunch break to check on me and did so whenever he could. When I say I trust him with my life, I mean it."

Dr. Mansberger says, "Saving someone's sight is one of the most important gifts we can provide. Christina and her family are an inspiration to others about the benefit of glaucoma treatment. Also, they remind us about the importance of telling your family members that you have glaucoma, and that they should have an eye exam. This knowledge saved Christina's vision."

National study examines role of vitamins, minerals in eye health

Legacy Devers Eye Institute was one of the largest recruitment centers for the Age-Related Eye Disease Study (AREDS) sponsored by the National Eye Institute. This study examined whether vitamins and minerals could prevent the development of age-related macular degeneration, which is a leading causes of vision loss in older adults.

Macular degeneration affects the retina in the back of the eye, causing the center part of your vision to become blurry or wavy.

The main findings in the study showed that a certain mix of supplements:

- Slowed the development of macular degeneration by
 25 percent only in people with intermediate macular degeneration
- Showed no effect in preventing macular degeneration in people with a normal retina

Which vitamins were tested?

The original vitamins contained 15 mg beta carotene (25,000 I.U.), 500 mg vitamin C, 400 I.U. vitamin E, 80 mg zinc, and 2 mg copper. In the second phase, researchers substituted lutein and zeaxanthin for beta carotene and found a slightly reduced risk of advanced AMD; they also reduced the dose of zinc.

Should smokers use the same vitamins?
Smokers should not take beta carotene, because it was shown to promote lung cancer in smokers. If you are a smoker, you can find a "smoker's formula"

that removes the beta carotene. Those may be called "AREDS with lutein." However, the best prevention against worsening macular degeneration is to stop smoking.

What to do now?

Vitamins were only beneficial in those with intermediate macular degeneration, and the only proven vitamins are listed above. First, you should ask your doctor if you have a level of macular degeneration that would benefit from vitamins.

"Lifelong good nutrition may lower the risk of

some eye diseases," the study's authors added. "A diet rich in certain dark green vegetables may reduce the risk of macular degeneration. You can help your general eye health by avoiding smoking, staying active and controlling your blood pressure."

You can help your general eye health by not smoking, staying active and controlling your blood pressure.

Thanks to those who participate in research

Thank you to all of the Legacy Devers patients who have volunteered for the AREDS trials and our other research studies. You have prevented blindness in millions of patients from macular degeneration and other diseases such as glaucoma and corneal diseases.

Sources

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How to donate to Legacy Devers Eye Institute

Legacy Devers Eye Institute provides some of the world's best research, education and clinical care. We are also the largest provider of free and low-cost eye care in Oregon. We appreciate the grateful patients and donors who support our mission of research, education and clinical care through the Good Samaritan Foundation. Every donation regardless of the amount makes a difference to saving someone's sight. To make a donation, contact Rena Whittaker at the Good Samaritan Foundation at 503-413-5585 or rwhittak@ lhs.org, or visit www.legacyhealth.org/giving.

Corneal collagen crosslinking now offered at Legacy Devers

The cornea service at Legacy Devers Eye Institute is proud to be the first center in Oregon performing a new procedure called corneal collagen crosslinking (KXL). Patients with keratoconus or a history of corneal thinning after LASIK surgery may be candidates for crosslinking. In these conditions, the

cornea becomes more and more warped with decreasing vision. Diseases like these are not extremely rare. Keratoconus, for example, is diagnosed in one out of every 2,000 people in the United States. Post-LASIK ectasia may impact as many as one out of 1,000 people who undergo LASIK.

KXL is an office procedure. It has been performed in Europe to treat keratoconus

and post-LASIK ectasia safely for over a decade. In many cases, the treatment is able to halt or greatly slow progression of disease. Many patients' vision improves and their corneas stabilize, allowing them to retain their best vision in contacts or glasses.

The procedure involves removing the top (epithelial layer) of the cornea and saturating the cornea with drops containing riboflavin, or vitamin B2. Next, a corneal specialist focuses ultraviolet light to this area to strengthen the tissue, making the treated areas of the cornea up to three times stronger.

Legacy Devers Eye Institute has been selected as a study site as part of a multicenter, randomized, controlled evaluation of the safety and efficacy of corneal crosslinking. We will help evaluate the KXL system with VibeX (riboflavin ophthalmic

solution) for corneal collagen crosslinking in eyes with keratoconus or corneal ectasia after refractive surgery. Michael Straiko, M.D., is the principal investigator for the study.

The study is an FDA-approved study sponsored by ACOS (American-European Congress of

> Ophthalmic Surgery). The study seeks to make KXL more widely available in the United States.

To enter the study, patients must be at least 12 years old and have topographic evidence of keratoconus or post-refractive surgery ectasia. Keratoconus patients must have a spectacles-corrected visual acuity of approximately 20/25. Corneal thickness

must not be less than 375 microns to ensure a safe and effective treatment. Prior to enrollment in the study, every patient will have a full evaluation by the cornea service, including extensive corneal measurements and analysis with our state-of-the-art Pentacam HR system.

We are pleased to continue the tradition of highquality, cutting-edge patient care and research at Legacy Devers Eye Institute.

We are also able to care for patients who do not qualify for the study. Those with ectasia too great for crosslinking may benefit from other procedures we offer, such as deep anterior lamellar keratoplasty (DALK) or corneal transplant.

If you know of patients with keratoconus or ectasia who might benefit from this trial, call or email our study coordinator, Kelsey Oakes, at 503-413-6540.



Michael Straiko, M.D., performs corneal collagen crosslinking on a patient at Legacy Devers

Legacy Devers adds three talented physicians

Once upon a time, the only retina specialist in Oregon was located at Legacy Devers Eye Institute. Our expectation is that Elizabeth Verner-Cole, M.D., and Sirichai Pasadhika, M.D., will restore our eminence in the care of retinal disease.

Elizabeth Verner-Cole, M.D.



Dr. Verner-Cole went to college in Pomona, Calif. She arrived in Portland after nearly a decade in Houston where she attended medical school and residency. She also spent a year there as an eye pathol-

ogy fellow. Dr. Verner-Cole is married and has three young children, but still has found time to be an accomplished cellist, performing in a string quartet, and enjoys cooking, yoga and riding a motorcycle.

Sirichai Pasadhika, M.D.

Dr. Pasadhika was born in Thailand and went to medical school and did ophthalmologic training



in Bangkok. He became a retina specialist by training in Sydney, Australia. He completed a uveitis and surgical internship at OHSU, a retinal degeneration fellowship at the University of Illinois, Chicago,

and an ophthalmology residency in Arizona. Dr. Pasadhika is married and has two children.

Blake Acohido, M.D.



Dr. Acohido will bring new energy to Devers Memorial Eye Clinic. He did his internship at Legacy Health and residency at OHSU. Dr. Acohido graduated magna cum laude from the University of Washington,

Seattle. He did research for several years at OHSU and then attended Chicago Medical School. His hobbies include playing the guitar, running and disc golf.

New Devers clinic coming to Legacy Emanuel

Legacy Devers Eye Institute—Emanuel opens in late 2013 on the campus of Legacy Emanuel Medical Center. Expanding our services to the east side offers easy access to our patients in the north and northeast neighborhoods of Portland. Blake Acohido, M.D., a new ophthalmologist with Legacy Devers, will provide a broad range of services at the new location.

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Honors and Awards

Brad Fortune, O.D., Ph.D., delivered the 2012 President's Award Lecture at the Optometric Glaucoma Society Meeting (OGS) in October 2012

James T. Rosenbaum's, M.D., report on the use of biologic therapy for the treatment of uveitis was selected for recognition by the Faculty of 1,000. The Faculty of 1,000 selects what it considers to be the top 2 percent of all publications.

James T. Rosenbaum, M.D., is a co-investigator on Zili Zhang's National Eye Institute Grant, Immune Tolerance in Uveitis.

Lin Wang, M.D., Ph.D., was awarded The Shaffer Grant, in the amount of \$40,000, from the Glaucoma Research Foundation (GRF): Project title: Noninvasive assessment of dynamic autoregulation in optic nerve head.

Shaban Demirel, O.D., Ph.D., Vision Research cover photo.

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Steven L. Mansberger, M.D., MPH, *Portland Monthly*, Portland's Best Doctors 2013.

Invited lectures

Brad Fortune, O.D., Ph.D., Department of Anesthesiology and Perioperative Medicine. OHSU, Portland, Ore. March 2013.

Michael Straiko, M.D., "Keratoconus, post lasik ectasia and corneal collagen crosslinking." Pacific University, Forest Grove, Ore. February 2013.

Michael Straiko, M.D., "The evaluation and management of keratoconus and post-lasik ectasia." February 2013.

Steven L. Mansberger, M.D., MPH, American Glaucoma Society. San Francisco, Calif. "AGS Video Awards." March 2013.

Steven L. Mansberger, M.D., MPH, "Staffing in the era of EMR." American Glaucoma Society, San Francisco, Calif. March 2013.

James T. Rosenbaum, M.D., "What dwells within: the microbiome and immunological disease." OHSU department of medicine grand rounds. March 26, 2013.

James T. Rosenbaum, M.D., "Uveitis, current challenges and opportunities." Sanofi Conference. Paris, France. April 11, 2013.

James T. Rosenbaum, M.D., "The eye and rheumatic disease." American College of Physicians Annual Meeting. San Francisco, Calif. April 13, 2013.

James T. Rosenbaum, M.D., "Does HLA B27 shape the microbiome?" Immune Tolerance Network. Boston, Mass. April 23, 2013.

Legacy Good Samaritan Medical Center



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