With new space, Macular Degeneration Center can grow and thrive

Visitors coming to Casey Eye Institute’s Marquam Hill location can expect to see some bustling activity next door at the former OHSU School of Dentistry. Demolition of the 1950s structure is now underway, paving the way for construction of a new, state-of-the-art Casey facility. Connected to Casey’s existing facility via a skybridge, the 60,000-square-foot building will house the Macular Degeneration Center, as well as other important research and patient care programs.

Relocating to dedicated space in the new facility will significantly expand the center’s research capacity and promote bench-to-bedside investigations in genetics, pharmacology, imaging technology and cell-based therapies. The new location will enable the center to build on its work analyzing the genetic underpinnings of macular degeneration, which will lead to early detection and more precise treatments. Experts in computational biostatistics will be recruited to evaluate the vast amounts of genetic data gathered over decades of research.

“Having more room will also allow us to better meet the rising demand for macular degeneration treatment as our population ages and lives longer,” said Christina Flaxel, M.D., director of the Macular Degeneration Center.

The new Casey building (shown in a rendering to the left of the existing facility) will house an expanded Macular Degeneration Center. Groundbreaking is expected to take place this June.

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Support services, such as vision rehabilitation and community outreach, will be an integral part of the program.

“The keys to ending blindness from diseases like macular degeneration are accurate diagnosis, timely care and effective treatment,” said Casey Director David Wilson, M.D. “This building project will enable us to move forward in all of these areas.”

Ask an expert

Q: Is it safe to take low-dose aspirin on a daily basis if you’ve been diagnosed with macular degeneration?

A: This is a common concern among patients with AMD, since they are in an age group in which many are taking daily aspirin for heart health and stroke prevention. Research studies about the use of aspirin and its possible effects on macular degeneration have had varying results, and there is no clear consensus. However, you should continue taking aspirin if your doctor has prescribed it, since its benefits most likely outweigh any risks.

Andreas Lauer, M.D.
Professor of Ophthalmology
Chief, Retina–Vitreous Division
OHSU Casey Eye Institute

Dr. Klein honored for achievements in retina research

Michael Klein, M.D., professor of ophthalmology and director emeritus of the Macular Degeneration Center, received the Retina Society’s prestigious Award of Merit in Retina Research last fall. The award recognizes outstanding vision scientists whose work contributes to knowledge about the retina and retinal diseases. As part of the award presentation, Dr. Klein was invited to give the Charles L. Schepens Lecture, a highlight of the Retina Society annual meeting that was established in honor of the founder of the society. His talk focused on genetics and age-related macular degeneration.

Dr. Klein was introduced by Emily Chew, M.D., deputy director of the Division of Epidemiology and Clinical Applications and the deputy clinical director at the National Eye Institute (NEI). She called him a “superb clinician, dedicated mentor and an outstanding researcher” and noted that “his work has changed how we care for patients with retinal diseases.”
A Note from the Director

Dear Friends,

Last summer, Americans enjoyed the rare opportunity of experiencing a solar eclipse, with its path of totality passing right through Oregon. Fortunately, few cases of retinal damage were reported, thanks in part to public service campaigns urging eclipse watchers to protect their eyes with glasses that met strict safety standards.

If only special glasses could be prescribed to prevent vision loss from age-related macular degeneration! Although we’ve yet to find a cure for the disease, research at the Macular Degeneration Center is at full throttle to uncover its underlying causes and develop more effective treatments. As you will read in this issue, the center’s relocation to a new state-of-the-art building next door will give us the space and infrastructure to build on this promising research and better serve patients.

The impressive progress we are making would not be possible without your support and generosity, including the many patients and friends who helped make our appeal last December so successful. Every dollar contributed helps further our efforts in the lab and the clinic, and bolsters our unique community education programs. Thanks to your vision and belief in our work, our aim of ending blindness from AMD is in sight.

Christina J. Flaxel, M.D.
Professor of Ophthalmology
Director, Macular Degeneration Center
OHSU Casey Eye Institute

Save the date!

PUBLIC SEMINAR
Raise your eye-Q about macular degeneration
Join faculty from the Macular Degeneration Center for a front-seat look at this leading cause of adult vision loss.

* AMD: What is it and how do I know I have it? *
  * Ambar Faridi, M.D. *

* Managing AMD: Today’s treatments and tomorrow’s possibilities *
  * Kavita Bhavsar, M.D. *

* Illuminating facts about light exposure and your eyes *
  * John Boyer, O.D. *

Saturday, April 21, 2018
9:30 a.m. to Noon
Macdonald Auditorium
Casey Eye Institute
3375 SW Terwilliger Blvd.
Portland, Oregon

Free — space is limited
Advance registration required
Call **503-494-8511** to register
AMD expo informs and inspires

Last fall’s 10th Macular Degeneration and Vision Expo offered a bit of something for everyone. Medical experts from Casey Eye Institute discussed the latest advances in macular degeneration research and treatment while vision rehabilitation instructors led sessions on adaptive technology, mobility techniques and strategies for living life fully with vision loss. The hundreds of patients, their family members and service providers who attended the free program also had the chance to learn about helpful community resources, time-tested vision aids and leading-edge assistive technologies from more than 20 exhibitors.

Sponsored by the Macular Degeneration Center in partnership with the Vision Rehabilitation Center at Casey, the expo is considered the region’s largest gathering for people with macular degeneration and other conditions that impair eyesight.

“Hosting community events like the expo are a top priority for the center,” said Casey retina specialist Christina Flaxel, M.D., director of the Macular Degeneration Center. “Macular degeneration continues to be the leading cause of vision impairment in older adults, and we expect an upsurge in the number of cases as our population ages. Our goal is to give patients timely and accurate information so they can better manage their disease and make the most of remaining vision. It’s also a great opportunity to meet other people facing the same challenges,” said Dr. Flaxel, whose talk at the expo focused on current treatments and clinical trials for macular degeneration.

Losing vision and finding resilience

The program, held at the Doubletree by Hilton Hotel Portland, lead off with an uplifting talk by mental health counselor and author Becky Andrews, who recounted her experience of losing eyesight from retinitis pigmentosa. Accompanied by her guide dog Georgie, Andrews emphasized that by becoming resilient, you can move from “coping” to “thriving.”

“When you think of coping, you think of getting by, doing the best you can,” she told the audience. “Thriving is when we are engaged and enjoying life, giving back and...
Becky Andrews’ book, Look Up, Move Forward, relates her story of finding resilience after losing vision and how you can apply this approach in your own life. Her book is available in various formats through Amazon, Nook and resilientsolutionsinc.com/look-up-move-forward.

Andrews, who has a counseling practice in the Salt Lake City area, said you can find resilience by adopting such traits as expressing your feelings, embracing new experiences, finding humor amid the frustrations of vision loss, being true to yourself and cultivating healthy, reciprocal relationships.

It was one of those relationships that led Andrews to become an avid runner, eventually competing in several marathons. A friend, who served as a tethered guide on her runs, urged her to participate in the Boston Marathon and helped Andrews devise a training plan. “It was pretty incredible to be at the starting line with her — someone who believed in me. We all need someone who says ‘you got this.’”

Finding meaning and purpose in your life is also important, said Andrews. “We all matter. There’s a way we can each make a big difference in the world. It lifts us and keeps us going,” she said.

View/listen to video recordings of morning presentations at caseyamd.com

The 2017 Macular Degeneration and Vision Expo was made possible by:

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Multnomah County Library

Oregon Talking Book and Braille Library

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With additional funding from:

Macular Degeneration Center Fund

Eschenbach representative Paul Wohlhueter demonstrates a hand-held video magnifier.
Ongoing clinical trials

**Metformin for dry macular degeneration**

**Purpose:** To determine whether oral Metformin HCL (a diabetes medication) is an effective treatment for slowing the progression of geographic atrophy in patients with dry age-related macular degeneration (AMD). Qualified study patients are being enrolled in a randomized study that lasts 18 months and requires four study visits at Casey Eye Institute. Eligible participants must be age 55 or older and have advanced dry AMD in one or both eyes. Candidates cannot have diabetes or currently be taking Metformin. Other eligibility criteria may also apply.

**Association between advanced AMD and alterations in the gut microbiome**

**Purpose:** To learn whether associations exist between gastrointestinal tract gut bacteria and advanced AMD. Researchers will also explore the connection between an individual’s genes and the activity of the gut bacteria. The study is recruiting people age 65 and older with advanced macular degeneration as well as those without the disease who meet other criteria.

**Genetics of Age-Related Macular Degeneration Study**

**Purpose:** To find genetic mechanisms associated with AMD, which will lead to more accurate early detection and precise treatments. Researchers are using advanced whole genome sequencing technology to find gene variations in large families and other populations affected by AMD. The study is supported in part by a major grant from the National Eye Institute.

**Advanced imaging trials**

**Purpose:** To test the capabilities of high-speed OCT angiography in patients with dry or wet AMD. OCT angiography uses light waves to produce extremely detailed cross-sectional images of eye structures. Investigators are studying whether this new version of OCT can visualize and measure blood vessel growth as well as fluorescein angiography, which involves the injection of a contrasting agent to highlight the problem vessels. The team is also comparing how retinal anatomy and blood flow differ among study patients in early, intermediate and advanced dry AMD.

**Diet and vision study (Carotenoids in Age-Related Eye Disease Study 2)**

**Purpose:** To learn whether the levels of pigment in the eye’s macula is a risk marker for the development of AMD and loss of retinal function with age. The study is also evaluating whether macular pigment declines with age and if so, what factors play a role. Macular pigment is made up of the nutrients lutein and zeaxanthin, which are highly concentrated in healthy retinas. These nutrients, known as carotenoids, are found in green, yellow and orange fruits and vegetables. Macular pigment may protect the macula by acting as an anti-oxidant and absorbing harmful blue light.

CAREDS 2 is an offshoot of the national Women’s Health Initiative (WHI), which has tracked the health of post-menopausal women since 1991. The study is limited to participants in the original CAREDS and involves gathering information about health and lifestyle habits, testing blood serum and macular pigment levels, and taking retina photos.
Studies with completed enrollment

**Ocular implant for wet macular degeneration (LADDER Study)**

**Purpose:** To compare the effects of an ocular implant that releases one of three different doses of ranibizumab (Lucentis) to injections of ranibizumab. The study implant releases the study drug continuously for a prolonged period of time and can be refilled by your doctor when needed. This approach may decrease the need for frequent injections into the eye. This Phase 2 study has completed enrollment and patients are being followed.

**Injectable medication for wet AMD (SEQUOIA Study)**

**Purpose:** To compare the safety and effectiveness of the study drug abicipar pegol to ranibizumab (Lucentis) in patients with an eye newly diagnosed with wet AMD. Abicipar pegol is an anti-VEGF agent that may be more long lasting than some current therapies for wet AMD. Enrollment is this Phase 3 study is completed and study patients are being followed.

**Gene therapy for wet AMD (GEM Study)**

**Purpose:** To assess the safety and dosing levels of a gene-based treatment, RetinoStat, for wet AMD. In this Phase 1 study, two helpful genes are delivered directly to the retina, where they “turn on” proteins that block abnormal blood vessel growth in a sustained fashion. Enrollment is completed and study patients are being followed.

**Lampalizumab for advanced dry AMD**

**Purpose:** To evaluate the effectiveness and safety of lampalizumab in patients with geographic atrophy (GA), an advanced form of dry AMD. The medication, given by injection into the eye, targets an enzyme that may encourage dry AMD to develop. The studies examined changes in vision and the area of GA. Enrollment is completed and patients are being followed. Those who complete all of their study visits can enroll into an extension study in which all participants will receive lampalizumab.

**BEACON Study (Implantable medication for dry AMD)**

**Purpose:** To learn if an implantable medication, Brimonidine, is safe and effective for treating geographic atrophy (GA), an advanced form of dry AMD. Brimonidine, used in eye drop form to treat glaucoma, has been shown to protect cells in the retina.

In this Phase 2 study, a tiny pellet was implanted into the eye's vitreous that releases the medication to the retina over a sustained period of time. Enrollment is completed and study patients are being followed.

For more information about these studies, please call the Macular Degeneration Center at 503-494-3537.
Vision Support Group

Are you experiencing changes to your vision?

Casey Eye Institute’s Vision Support Group is a great place to:

- Connect with others experiencing similar challenges
- Share your personal story and strategies for dealing with vision loss
- Learn about helpful tools and community resources

The group meets every other Wednesday from 1–2:15 p.m. at Casey’s Marquam Hill location. Interested in participating or have questions? Please call Casey social worker, Tara Albury, L.C.S.W. at 503-494-1618. Family members welcome!