



DECADE OF VISION
an initiative of the **2010-2020**
Alliance For Eye And Vision Research

ALLIANCE FOR EYE AND VISION RESEARCH

In conjunction with:

Research to Prevent Blindness

Alliance for Aging Research

Association for Research in Vision and Ophthalmology

European Vision Institute Lighthouse Guild

Macula Vision Research Foundation

continues education about eye and vision research with a Briefing that begins the second annual Emerging Vision Scientists Day on Capitol Hill held during International AMD Awareness Week 2016 and Healthy Aging Month

Advances in the Diagnosis and Treatment of Age-Related Macular Degeneration (AMD) and Retinal Diseases

Wednesday, September 14, 2016

12 Noon - 1:15 pm

House Rayburn B-338

Amir H. Kashani, M.D., Ph.D.

**(USC Gayle and Edward Roski Eye Institute/Keck School of
Medicine/University of Southern California)**

R.S.V.P. to Dina Beaumont @ 202-407-8325 or dinabeau@aol.com

AEVR, a 501(c)3 Non-Profit Educational Foundation, is pleased to host this widely attended event, with support for event management provided by Regeneron.

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What is the burden of AMD?

AMD is the leading cause of blindness and low vision in the United States and the developed world. It destroys central vision through proliferation of new blood vessels (“wet” AMD) or gradual breakdown of cells (“dry” AMD) in the central part of the retina, or macula, which contains light-sensing cells of the eye. Vision loss from AMD makes it increasingly difficult to read, drive, and perform other everyday tasks, thereby affecting productivity, independence, and quality of life and adding significantly to cost burden. One-third of AMD patients experience clinical depression.

- In 2010, AMD Alliance International estimated that 33 million people worldwide experience vision impairment from AMD at a direct healthcare cost of \$343 billion.
- In 2014, Prevent Blindness projected the annual cost of vision disorders in the United States by 2050 at \$373 billion—or \$717 billion when adjusted for inflation. This cost is driven, in part, by the prevalence of aging eye diseases, such as AMD and other diseases that affect the retina.
- The National Eye Institute (NEI) within the National Institutes of Health (NIH) estimates that 200,000 Americans each year go on to develop advanced AMD, with this number expected to double by year 2020.

What is the Latest Research in AMD?

In the past 15 years, AMD treatment has progressed from few effective therapies to multiple options that prevent progression of advanced disease and even reverse vision loss for wet AMD. Featured speaker Amir H. Kashani, M.D., Ph.D. will describe these and other promising areas of research that include:

- NEI-funded researchers have identified genes associated with increased risk of AMD—many of which are associated with the body’s innate immunity.
- NEI’s *Age-Related Eye Disease Study (AREDS)* demonstrated that daily high doses of vitamins C and E, beta-carotene, and minerals zinc and copper reduced the risk of progression to advanced AMD by 25 percent. *AREDS2* replaced beta-carotene with lutein and zeaxanthin for a safer formulation.
- The Food and Drug Administration (FDA) has approved ophthalmic drugs that emerged from NIH-funded research to treat the “wet” form of the disease, stabilizing—and in some cases—restoring vision. These drugs have also been approved to treat diabetic eye disease.

About the Speaker.....

Amir H. Kashani, M.D., Ph.D. serves as an Assistant Professor of Ophthalmology at the USC Gayle and Edward Roski Eye Institute in the Keck School of Medicine at the University of Southern California. He is a clinician-scientist with an active practice in both medical and surgical retinal diseases including AMD, diabetic retinopathy, retinal vein occlusions, and retinal detachments, among other common retinal diseases. Dr. Kashani’s translational research focus is on developing novel diagnostic and therapeutic methods to treat retinal diseases through the use of advanced imaging spectroscopy, Optical Coherence Tomography (OCT, which is non-invasive, three-dimensional imaging of the retina), and novel surgical techniques. He has been a Clinical Investigator for a number of trials, most recently serving as Principal Investigator for a trial funded by the California Institute of Regenerative Medicine (CIRM) to test a novel stem cell-based therapy for severe vision loss from the advanced dry form of AMD. This form of AMD currently has no treatment.

In October 2015, Dr. Kashani participated in the first-ever *Emerging Vision Scientists (EVS) Day* on Capitol Hill, displaying a poster of his breakthrough research. This year, he has been invited back by AEVR to serve as the featured speaker at this Briefing, which begins the second annual *EVS Day*—with 22 early-stage investigators participating.

AEVR, a 501(c)3 non-profit educational foundation, is hosting this widely attended event featuring an eye healthy luncheon held during *International AMD Awareness Week and Healthy Aging Month.*