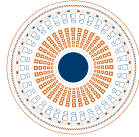


EDUCATION

AEVR and TFOS Highlight Consequences of Lifestyle Choices on the Ocular Surface



**DRY EYE
AWARENESS MONTH**



**RESEARCH SAVING SIGHT,
RESTORING VISION**
an Initiative of the
Alliance for Eye and Vision Research



On July 13, AEVR's *Research Saving Sight, Restoring Vision Initiative* and the Tear Film & Ocular Surface Society (TFOS) joined with the vision community and coalition partners (see bottom box) in recognizing July 2021 as *Dry Eye Awareness Month* in the sixth annual Congressional Briefing entitled *A Lifestyle Epidemic: Ocular Surface Disease* that was streamed globally.

In an interview-style discussion led by AEVR Executive Director James Jorkasky, who is a Dry Eye Disease (DED) patient, key leaders from TFOS' next Global Workshop entitled *A Lifestyle Epidemic: Ocular Surface Disease* addressed the consequences of the lifestyle choices that we make, directly or indirectly, on Ocular Surface Disease (OSD). The Workshop will engage 128 representatives from 37 countries in its ten Subcommittees that include Digital Environment; Cosmetics; Nutrition; Elective Medications and Procedures; Environmental Conditions; Lifestyle Challenges; Contact Lens Wear; Societal Challenges; Public Awareness; and Industry Liaison. TFOS plans to complete this evidence-based Workshop process within 18 months, recognizing what we know and what we do not yet know that requires further research.

In his introduction, Mr. Jorkasky recognized that the vision community's knowledge of diseases of the ocular surface—or front-of-the-eye—has evolved dramatically in the past few years. The NEI is supporting numerous studies on the causes of and quality-of-life implications from OSD, as is private industry. The NEI has launched the Anterior Segment Initiative (ASI) to address the clinically significant OSD problems of DED, ocular pain, and ocular inflammation in terms of pain and discomfort sensations and disruptions in the tearing reflex. The ASI plans to study relevant anterior segment neural pathways that contribute to normal or abnormal functioning of the circuits related to the ocular surface to better understand and mitigate disease.



Jennifer P. Craig, PhD, FCOptom
(The University of Auckland)

Workshop Steering Committee Chair Dr. Craig addressed digital eye strain, contact lens wear, and lifestyle challenges:

"In research prior to the COVID-19 pandemic, we were becoming aware of the impact of digital technology on the eye's ocular

surface. We know that using a computer screen is very different from reading a book. With the extra cognitive load and visual processing requirements, we forget to blink, which can lead to what we call the vicious circle of DED."



David A. Sullivan, MS, PhD, TFOS
Founder and Chair, TFOS Board
of Directors

Cosmetics Subcommittee Chair Dr. Sullivan addressed cosmetics, environmental conditions, and societal challenges:

"The average woman in the United States wears twelve different cosmetics daily, and the average man uses six. There are more than 12,000 ingredients that are used, and less than 20 percent have been shown to be safe. Some can disrupt hormone action or can be toxic to the cells in the eye, and this can lead to DED."



Christopher E. Starr, MD (Weill
Cornell Medicine, New York-
Presbyterian Hospital)

Public Awareness Subcommittee Chair Dr. Starr addressed nutrition, elective medications and procedures resulting in "iatrogenic" dry eye, and the public awareness challenges of the Workshop's conclusions:

"The deeper we get into the Workshop, the more we learn from the published literature is that there are even more questions. And the only way to answer those with any high level of assurance is through funded research. That's where government agencies like the NIH and others are so critical in our ability to answer the new questions that this activity will generate."

DED, which has been identified as a global problem affecting more than 30 million people in the United States alone, occurs when the eye does not produce tears properly or when the tears are not of the correct consistency and evaporate too quickly. For some people, it feels like a speck of sand in the eye, or a stinging or burning that does not go away. For others, dry eye can become a painful chronic and progressive condition that leads to blurred vision or even vision loss if it goes untreated. Moderate-to-severe dry eye is associated with significant quality-of-life consequences, such as pain, role limitations, low vitality, poor general health, and depression. DED has no cure, but its signs and symptoms can be managed—often dependent on lifestyle choices and changes.

Although researchers have long known about age and sex as factors in DED, they are now discovering ethnic and racial differences and that dry eye increasingly impacts younger patients. It can have many causes including: side-effects from medications or eye surgery (called iatrogenic Dry Eye); lid disorders; immune system diseases, such as Sjögren's, lupus, or rheumatoid arthritis; contact lens wear; cosmetic use; and environmental exposure. Especially during the COVID-19 pandemic, billions of individuals globally have been reliant on digital communications to learn, work, and stay in touch. Prolonged device exposure time can have many consequences, including Digital Eye Strain which can result in blurred vision, as well as both potential short- and long-term effects, such as DED.

TFOS' latest initiative follows its Dry Eye Workshop II (TFOS DEWS II™) Report, released in July 2017 and published in *The Ocular Surface* journal. That re-examination of TFOS' initial 2007 Report updated the definition, classification, and diagnosis of DED; critically evaluated the epidemiology, pathophysiology, mechanism, and impact of the disease; addressed its management and therapy; and developed recommendations for design of clinical trials to assess therapies.

In addition to AEVR and TFOS, ten vision community organizations and coalition partners signed onto a June 23 press release to support the July 2021 *Dry Eye Awareness Month* educational activities. AEVR thanks ARVO for live-stream support and Novartis for event management support. NAEVR also thanks Research!America which, on July 6, posted on its blog an AEVR story highlighting the vision community's *Dry Eye Awareness Month* activities.

Video of the event is on the AEVR Web site at www.eyeresearch.org.