

NAEVR/AEVR
1801 Rockville Pike, Suite 400
Rockville, Maryland 20852-1606

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
SUBURBAN, MD
PERMIT NO. 6456

World Sight Day 2019 Congressional Briefing Focuses on the Promise of Artificial Intelligence for Vision and Eye Health

NEED TO KNOW:

The October 17 World Sight Day Congressional Briefing, held by VISION 2020 USA and supported by 18 vision organizations, including AEVR (see box right), focused on the promise of Artificial Intelligence (AI), Information Technology (IT), and Big Data for vision and eye health. The Briefing featured speaker Michael F. Chiang, MD, Knowles Professor of Ophthalmology & Medical Informatics and Clinical Epidemiology at Oregon Health & Science University (OHSU), and Associate Director of the OHSU Casey Eye Institute



From Left: Maria Zacharias and Mary Frances Cotch, PhD, both from the NEI, with Dr. Brinks. Dr. Cotch serves as the NEI's Acting Deputy Director.

About VISION 2020 USA

VISION 2020 USA has been organized to better coordinate the efforts of the many US organizations working in the field of blindness prevention, both nationally and internationally. VISION 2020 USA is committed to assuring the right to sight for all peoples both within the US and countries outside the US. Launched in 2009, nearly 40 organizations have come together under the VISION 2020 USA umbrella, which is the national entity within the International Agency for the Prevention of Blindness (IAPB) and its VISION 2020: The Right To Sight initiative.



From left: Sean Curry from the Prevention of Blindness Society of Metropolitan Washington, AEVR's James Jorkasky, Michael Buckley from the BrightFocus Foundation, and Sara Brown, from Prevent Blindness



WSD Briefing Sponsors included:

Alliance for Eye and Vision Research
American Academy of Optometry
American Optometric Association
Association for Research in Vision and Ophthalmology
Casey Eye Institute
Helen Keller International
Himalayan Cataract Project
International Eye Foundation
Kellogg Eye Center for International Ophthalmology
Lighthouse Guild
Lions Club International
One Sight
Orbis International
Pacific University College of Optometry
Prevent Blindness
R. Ramchandran, Flaum Eye Institute
Seva Foundation
Vision Impact Institute



From Left: Victoria Sheffield, from the International Eye Foundation, VISION 2020 USA Chair Mitchell Brinks, MD, MPH, and featured speaker Michael F. Chiang, MD, both from the Casey Eye Institute/Oregon Health and Science University

Since Dr. Chiang's specialty is pediatric ophthalmology, he initially described the potential to harness AI to better diagnose and treat such visual conditions as Retinopathy of Prematurity (ROP, a blinding eye condition in premature babies), as well as Diabetic Retinopathy (DR, the leading cause of vision loss in the working age

population) and AMD (the leading cause of vision loss in individuals age 65 and older). Stating that ophthalmology has taken the lead in the use of AI, he recognized that the first FDA-cleared autonomous AI system in any field of medicine was approved in 2018 for the automated detection of clinically significant DR. He then described some of the implications for how AI might be used in screening for eye disease in the future, whether at a Primary Care Physician office versus that of an ophthalmologist, or how it could be managed by the private sector, such as at a retail store.

Stating that AI holds the potential to diagnose eye disease earlier and better, he acknowledged that it may also help to predict systemic health issues, such as cardiovascular disease. However, AI is only as good as the Big Data that is used to develop it. In that regard, he emphasized that ophthalmology again has taken the lead, with the American Academy of Ophthalmology's IRIS® Registry not only being the first national registry but the

largest specialty-specific registry in any field of medicine, with information on 253 million eye exams to-date. The Big Data gleaned from registries such as IRIS® facilitate the development of population-based medicine, which then leads back to more personalized health care approaches.

He concluded by identifying some of the barriers for Big Data, such as Electronic Health Records (EHR) that do not fully reflect the information collected during an eye exam (for example, the complex images that show changes in the eye) or that lack interoperability with other EHR systems.

Prior to Dr. Chiang's presentation, Victoria Sheffield of the International Eye Foundation spoke about the recently issued World Health Organization (WHO) Report, which estimates that there are 2.2 billion people globally experiencing vision impairment, and how it can be used as a roadmap to guide the vision community's research and educational activities in the next decade.



Executive Director
James F. Jorkasky
240-221-2905 | jamesj@eyerresearch.org
Director, Government Relations and Education
David H. Epstein
240-221-2902 | depstein@eyerresearch.org
1801 Rockville Pike, Suite 400
Rockville, Maryland 20852-1606
www.eyerresearch.org