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Cool Optometry • Optics • Kudos • Innovation • Enlightenment



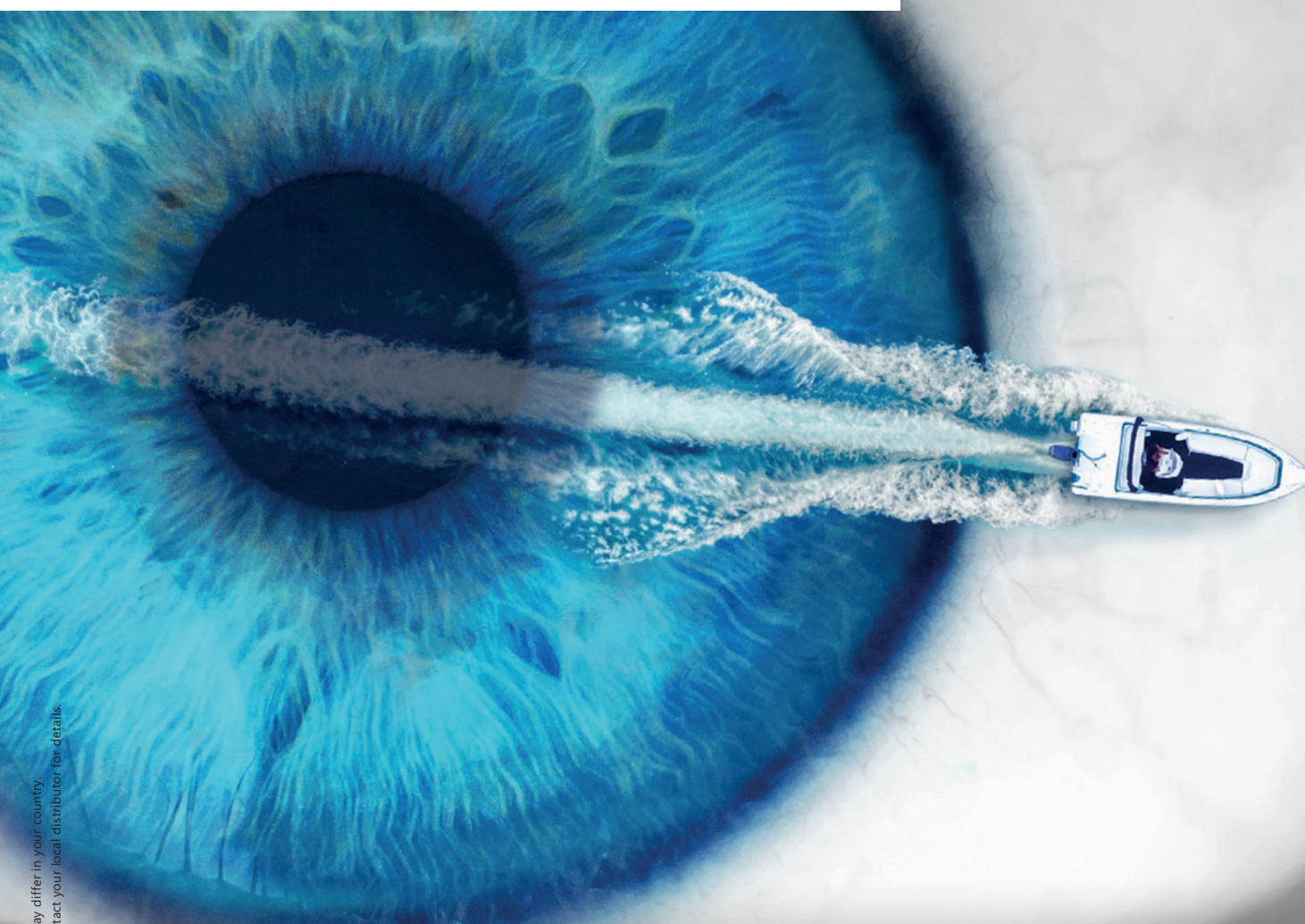
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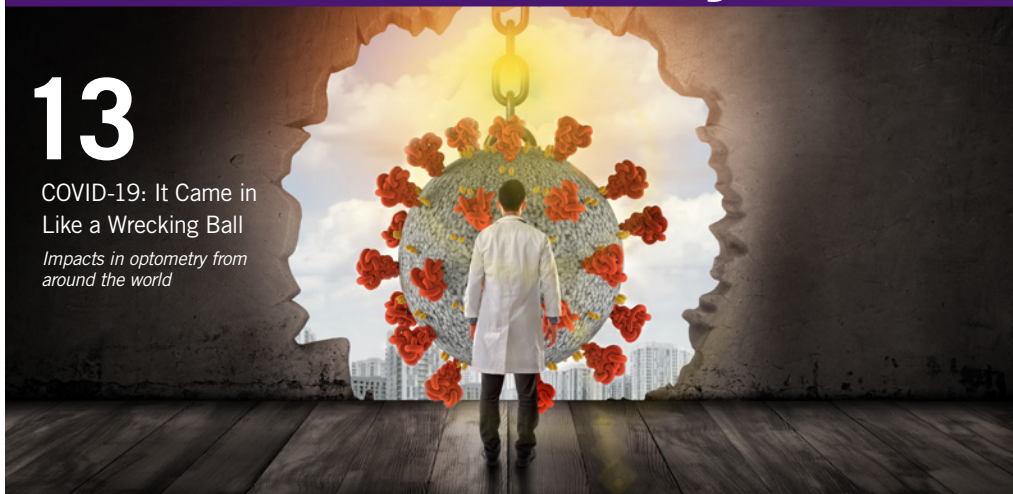


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# A better vision for 2021

Dear Readers,

**A**s we briefly glance at the receding image of 2020 in our collective rearview mirrors, we now train our sights on the challenges — and opportunities — that lie on the road ahead in 2021.

Fear and anxiety still permeate our daily lives while the struggle to contain the pandemic continues. Although progress has been made with the rollout of vaccines and the imposition of tighter social controls, the exit seems further than everyone would hope. But, thankfully, we can now see a pin light at the end of the tunnel. In the meantime, what should we do?

### Best practices are, well, best.

Make a full inventory of your practice tools and protocols. Is there anything that stands out as being effective in ensuring patient loyalty? Continue and even improve on these practices. We all know how empathy is a dire need nowadays, so every little gesture — an email, note, text or phone call — would go a long way toward assuring your patients that you care and want them to be well. This will not only make your patients stick with you, they may even become your champions by referring you to others. There are a million and one small and inexpensive acts you can do now to help you not only maintain, but bolster, your patient and public persona. Using social media is one inexpensive way to keep in touch (although great care should be taken to make sure your messaging is professional).

### Specialization will always be our “practice saver”

The surge in myopia cases (which I had termed “the other pandemic” in another article I wrote) make myopia management a field that practitioners can explore as an area for specialization. Myopia control can be a lucrative specialization. And getting up to speed may not be that difficult. It has been the topic of countless webinars and online CE courses which eye care practitioners can easily access on their devices.

Dry eye will also most likely be one of your most commonly diagnosed eye conditions. The increasing awareness of this threat has most involved industries willing to support eye care practitioners by, among others, ramping up marketing of their products, even providing pricing incentives. This is another practice space worth exploring.

Online practice (refraction and prescribing of contact lenses, drops and even glasses) is now commonplace and has become part of the (wait for it) — new normal. Many practitioners are assessing their capability to deliver online service and are scrambling to upgrade their websites, social media outlets, etc. But practitioners should be aware of the ethical and professional issues involved, and should seek guidance from their local regulatory bodies.

So, while 2020 might have not totally lived up to its reputation as being synonymous with perfect vision, it is up to us to make sure 2021 provides a clearer path for us and our vision care constituents.

Best,

**Dr. Carmen Abesamis-Dichoso**

OD, MAT, FPCO, FIACLE, FAAO







**Dr. Kristie Nguyen**  
OD

**Dr. Kristie Nguyen** is a board-certified optometrist. She currently serves as a contract doctor for Perez and Associates and Phan-Tastic Eye Care in Altamonte Springs, Florida, USA.

After graduating in the top 10 of her high school class with honors, she went on to obtain her Bachelor of Science degree from the University of Houston, Texas. While at U of H, she volunteered at a local hospital and worked as an optometric assistant. Dr. Nguyen obtained a Doctorate of Optometry (O.D.) in 2005 from Nova Southeastern University College of Optometry in Fort Lauderdale, Florida. She conducted her medical internships at the Chickasaw Nation Health Clinic in Ardmore, Oklahoma and the Lake Mary Eye Care in Lake Mary, Florida. Dr. Nguyen is a member of the American Optometric Association, the Florida

Optometric Association, Young ODs of America, OD Divas, Optometry Divas and the Central Florida Optometric Society.

In addition, she has been an executive board member for Optometry Divas for the past two years. She is also a brand ambassador for an independent eyewear brand called Kazoku Lunettes and director of business development for an online optical company called Optazoom. She is also an independent consultant for Rodan+Fields, which is a global clinically tested skincare brand.

Dr. Nguyen is married and has two beautiful daughters. She enjoys going to the beach, hanging out at Disney, and reading.

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**Dr. Oliver Woo**  
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**Dr. Oliver Woo** graduated from the School of Optometry, University of New South Wales, Australia in 1994 and established an independent optometrist practice in Sydney, Australia in 1997. In 2007, he became the first Australian Fellow of the International Academy of Orthokeratology (FIAO) and mentor. Dr. Woo has special interests in pediatric optometry, myopia prevention and control contact lens fitting of orthokeratology and specialty contact lenses.

He opened an Orthokeratology and Myopic Control Clinic in 2010. Dr. Woo uses and provides a variety methods in myopic management.

Dr. Woo has been actively participating in the continuing education conference of the IAOA (International Academy of Orthokeratology Asian

Branch) as an instructor and mentor for FIAO of Chinese ophthalmologists, as well as in many local and international optometry and ophthalmology conferences as a lecturer and mentor.

He served on the board of directors of the Oceania Society of Orthokeratology (Australia and New Zealand) from 2014 to 2020. He was the FIAO Section Chairman (Oceania — Australia and New Zealand), senior member examination chair and examiner from 2014 to 2017. Dr. Woo actively participates in many local and international optometry and ophthalmology conferences as a lecturer, mentor and coach, with more than 90 international presentations.

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**Dr. Carmen Abesamis-Dichoso**  
OD, MAT, FPCO, FIACLE, FFAO

**Dr. Carmen Abesamis-Dichoso** received her Doctor of Optometry from the Central Colleges of the Philippines in 1989, and earned her Master of Arts in Teaching from the Central Colleges of the Philippines in 2001. Her specialties include special contact lens design for keratoconus, children and high astigmatism; and visual assessment of the mentally challenged, autistic, ADHD, cerebral palsy and learning disabilities. In addition, Dr. Abesamis-Dichoso has been an orthokeratology practitioner in the Philippines since 2005. Since 1998, she has been self-employed in a private practice at Medical Plaza Makati.

She was awarded “Outstanding Optometrist of the Year” in 2017 by the Optometric Association of the Philippines. Currently, Dr. Abesamis-Dichoso serves as the International Affairs Committee chair of the Optometric Association of the Philippines; director of the Special Olympics Opening Eyes in the Philippines; program manager of Optometric Association of the Philippines Vision Screening

Program and provision of eyeglasses with the United Nations Development Program in 10 areas and four Regions in the Philippines; and chairperson of the Special Olympics Healthy Athletes Program in the Philippines.

Dr. Abesamis-Dichoso is a fellow of the American Academy of Optometry; a founding fellow at the Philippine College of Optometrists; a fellow of the International Association of Contact Lens Educators; an Asia-Pacific Regional advisor for the Special Olympics Opening Eyes; treasurer at the Asia-Pacific Council of Optometry; and is an Asia-Pacific Council of Optometry (APCO) representative for the World Council of Optometry, in addition to being a member of the Legislation, Registration and Standards Committee. She has also authored numerous published papers and is a popular lecturer at industry meetings.

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# The Future of Myopia Treatment in Children

by Jillian Webster



A panel was assembled to discuss the future of collaboration in myopia research and treatment following the recent *American Academy of Optometrists (AAO) 2020 Virtual Press Conference on Myopia Progression in Children*. During the press conference, four speakers addressed the prevalence of myopia as a global health issue, cited ongoing studies and advances in myopia treatment, and emphasized the need for international partnership.

## Collaboration is key

Dr. Richard Abbott, past president of the AAO, gave an overview of myopia's prevalence and approaches to treatment; he emphasized expert collaboration is necessary for successful treatment. Dr. Abbott believes the combination of global resources and increased global awareness are key to combating the disease.

According to the International Association for the Prevention of Blindness (IAPB), Dr. Abbott said: "It is predicted that in 2050, nearly 50 percent of the [global] population will

be affected by myopia." He noted that this is a significant increase from the 28 percent of global myopia cases reported by the IAPB in 2010. Dr. Abbott also stated that cases of high myopia will grow from 300 million in 2020 to about 900 million in 2050.

Dr. Abbott noted: "There are vision-threatening eye conditions that are clearly linked or associated with high myopia, such as retinal detachment, glaucoma, cataract that require surgery, and macular scarring — so these conditions will also increase."

A task force was appointed by the AAO to battle these statistical trends. The task force is co-chaired by Drs. Abbott and Donald Tan. They then chose 20 experts from around the world to contribute. Their goals are to reduce the age of myopia onset and to slow the progression of myopia, globally.

## Myopia and youth self esteem

Dr. Mary Frances Cotch, the director of the National Eye Institute (NEI) Office of Vision Health, focused her talk on the

effects of myopia in youth populations. She linked the development of myopia to a number of academic and social concerns.

Dr. Cotch said that myopia does influence children in many ways and can affect their sense of well-being overall. "For some, it may manifest because they have difficulty paying attention in school and this could impact negatively on their grades — which influences their choices for their career trajectories," she shared.

"Other children may excel at sports and dream of a career in sports or an academic college scholarship [and] the impact of myopia on their self esteem can really be profound," said Dr. Cotch.

Another environmental factor is socioeconomic status. Dr. Cotch said: "Myopia becomes a burden on [the child] because some of them know that their family can not afford to buy eyeglasses. These are issues of equity that need to be addressed."

Once myopia is identified in young learners, there are significant social determinants. Dr. Cotch makes it





clear that in the efforts toward global awareness of myopia as a public health concern, environmental and lifestyle factors are important.

## Strategies for myopia control

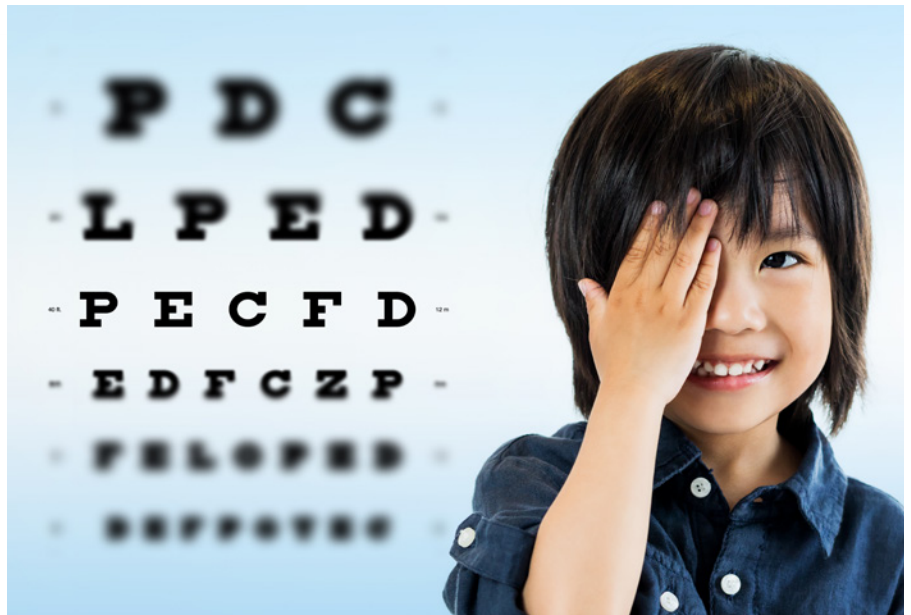
Dr. Susan Cotter, the incoming president of the AAO, discussed a variety of optical strategies that have been shown to slow myopia progression. These include different types of contact lenses and spectacles that are then analyzed on their ability to resist the progression of myopia and the changes to the axial length of the eye.

There are two different kinds of spectacle lenses: customized single vision lenses and bifocals. Bifocals come in two types, executive bifocals and progressive addition lenses (PALs). In the study Dr. Cotter discussed, PALs showed greater slowing of myopia progression versus single vision lenses (SVLs). However, the differences were minimal — one quarter of a unit — and therefore not clinically significant. The study on two different types of bifocals showed more promise.

The bifocal clinical trial discussed by Dr. Cotter included two executive bifocals, one with a base-in prism and one without, using SVL as a control. Compared to SVL, both bifocals performed better. The bifocals with the base-in prism, Dr. Cotter remarked, slowed myopia progression by a diopter, compared to the SVL and bifocal lenses.

Dr. Cotter also described customized lenses that are now being released, with a focus on Defocus Incorporated Multiple Segments (DIMs). DIMs have a clear optical zone with a blurring in the periphery. These lenses were compared with SVLs and showed a benefit in reducing progression of myopia by approximately half a diopter and a slowing of axial lengthening.

Contact lenses have also been shown to reduce the progression of myopia. Dr. Cotter discussed orthokeratology, the process of corneal reshaping. During this process the subject sleeps in lenses that are fitted to be flatter than their cornea, thus pressing the cornea downward and reshaping the eye. This



process has shown positive results.

MiSight (CooperVision; California, USA), a FDA-approved soft multifocal lens, has also shown benefits. These lenses have a central distance zone with plus power in the periphery. Dr. Cotter said: “Chamberlain et.al, in *Optometry and Vision Science*, reported randomized trial results where they compared these lenses to SVLs and found about two-thirds of a unit difference.”

Dr. Cotter discussed a large multifocal contact lens study known as BLINK. This recently published study compared SVL contact lenses with medium add power and high add power lenses, worn by children. The high add power contact lenses showed the most promise in the reduction of myopic progression.

The reduction of myopic progression and axial length can be treated by both contact lenses and spectacle lenses, according to Dr. Cotter. There is also potential for a combination of treatments that maximize the potential positive outcomes in myopia treatment.

## Combination myopia treatments

Dr. Michael Repka, AAO medical director for government affairs, said: “There is almost certainly going to be a combination of treatments that are going to be useful in this condition.” Low-dose atropine eye drops in

combination with other therapies have been shown to reduce the progression of myopia. This drug, Dr. Repka said, though not FDA-regulated, is safe and commonly used in Eastern populations.

Dr. Repka also suggests that myopia can be treated environmentally, as well as clinically. He said: “More outdoor time equals less myopia in studies that have been completed in Eastern Asia. This may be due to a number of different factors.” He mentioned a study conducted in Taiwan that found a reduction of the onset of myopia by 9.1% by making the students stay outside for an extra 40 minutes a day.

Though there are variables, he suggested that more outdoor time is better for general health, as well as being clinically significant in reducing the progression of myopia. 🍷

## Editor’s Note:

The AAO 2020 Virtual Press Conference on Myopia Progression in Children took place on November 16, 2020. Reporting for this story also took place during the press conference.





# Shedding Light on the Challenges of Obtaining Best Corrected Visual Acuity

by Andrew Sweeney

Ensuring patients get the best possible visual outcomes is a main focus of day-to-day practices for eye care professionals of all stripes.

Indeed, the best possible outcome is often generalized as “20/20 vision.” However, this is somewhat misleading. In fact, 20/20 vision is a term used to express normal visual acuity (VA), or the clarity and sharpness of vision, measured at a distance of 20 feet. It’s one of several factors that influence vision; other attributes like peripheral vision, eye coordination, depth perception, focusing ability and color vision, contribute to overall visual ability too.<sup>1</sup>

There are, of course, many conditions that can lower VA, including myopia, presbyopia and hyperopia. It can also result from another condition or disease. The segment of the optometry

industry focused on improving VA is worth billions of dollars; however, despite its lion share of the market, research into the best visual acuity management practices exists to a lesser degree compared with other ophthalmological issues.

The challenge of achieving best corrected visual acuity (BCVA) in patients is one optometrists and ophthalmologists face on a day to day basis, and refers to the measurement of the best vision correction that can be achieved with lenses. If an individual’s vision is 20/40 without glasses, but 20/20 with them, their BCVA is said to be 20/20.

## After all, we all want to avoid walking into walls

The basic guidelines for achieving BCVA

are similar worldwide.

First, before examining a patient for any ocular complaint — and especially in an emergency setting — testing and recording VA before treatment is imperative. Visual acuity recorded in this setting can prevent future ambiguity regarding the time and cause of visual loss. In most instances, either a standard printed Snellen eye chart is used with the patient 20 feet (6m) away or a reading card with a reduced eye chart is used at 14 inches (35cm).<sup>2</sup> Based on the results of the examination, the patient is offered lenses or corrective treatment to achieve BCVA.

Central VA can be thought of as the vital sign of ocular function. When it’s found to be 20/20, a great deal of information is obtained: the eye is properly refracted, the ocular media are clear, the foveal region of the retina is functioning, and the optic nerve and visual cortex are generally intact. Taken together with confrontation visual field testing and pupillary function, the measured level of VA can be used to corroborate or question a patient’s complaint of decreased vision.<sup>2</sup>

Naturally, the importance of VA, and the challenge of achieving BCVA, is not lost on the Asia Optometric Congress (AOC), one of the largest and most visible groups dedicated to optometry in the world. The AOC held an online conference last November (eAOC 2020) and covered a wide array of topics related to optometry. Naturally, the impact of the COVID-19 pandemic was featured heavily, but other issues, including the proper management of visual acuity, were covered too.

As part of the online conference, Dr. Soe Min Aung, a senior eye consultant at the North Okkalapa General and Teaching Hospital, Yangon, Myanmar, presented *The Challenges of Achieving Best Corrected Visual Activity*. His presentation was a concise and highly





informative examination of the best practices one can employ to achieve best corrected visual acuity (BCVA). Dr. Aung drew primarily on his own experience of treating patients within an underdeveloped healthcare infrastructure in Myanmar.

## Optometrists: Know your enemy

Dr. Aung's presentation on the nature of astigmatism, where the eye is not roundly shaped, should prove particularly beneficial to new clinicians. There are two forms of the condition he said, corneal and lenticular, caused by mishapement in the cornea and lens respectively. This should be particularly important to pediatric clinicians as untreated myopia and astigmatism may go on to develop into keratoconus, a progressive disorder in which the cornea assumes a protruding cone shape.

The doctor said clinicians should be vigilant for risk factors including a family history of keratoconus and lenticonus, corneal scarring, excessive myopia, and a history of eye surgery. Symptoms include blurred vision, eye strain and headaches; he recommended using devices like the phoropter, keratometer, topographer and autorefractor during diagnosis. Like many conditions, both ocular and otherwise, Dr. Aung emphasized that early diagnosis is the key to good patient management and outcomes.

## Understanding the importance of risk factors in diagnosis

Dr. Aung also spoke about the importance of lifestyle factors in causing ocular conditions, and that they should be factors taken into consideration by clinicians. Age-related macular degeneration (AMD), for example, has risk factors including smoking and poor diet, as does diabetic retinopathy, which he said often causes no symptoms in the early stages of the disease. Linked to both these conditions he said, is macular edema, with risk factors including diabetes, AMD and eye surgery, too.

Though Dr. Aung says conditions like

astigmatism and keratoconus are some of the most common threats to visual acuity, he also spoke about the dangers of central vision loss. Conditions such as diabetic retinopathy, AMD and macular edema can have a significant impact on VA, as much as (or even more than) myopia and presbyopia. He emphasized that doctors must exercise constant vigilance for their patients and recommends frequent vision check-ups.

According to Dr. Aung, there are several key things optometrists can do to ensure that BCVA is achieved on a regular basis. First, patients with astigmatism should be required to wear glasses or contact lenses. Second, low vision aids should be provided for patients suffering from AMD. Finally, serious eye problems should be immediately referred to an ophthalmologist as early as possible to maintain or improve vision.

Ultimately, a main takeaway of Dr. Aung's presentation is to always act and always check — if a vision issue appears, check it as soon as possible; in some cases, damage and vision loss can be prevented if treated quickly enough.

His experience of working on the frontlines will no doubt be of particular benefit to optometrists and we hope to view more presentations on this subject in 2021. 🍷

## REFERENCES:

1. The American Optometric Association. Visual Acuity. Available at <https://www.aoa.org/healthy-eyes/vision-and-vision-correction/visual-acuity?ss=y>. Accessed on January 31, 2021.
2. Walker KH, Hall WD, Hurst JW. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990.

## Editor's Note:

The Asia Optometric Conference (eAOC 2020) took place from November 18 to 19, 2020. Reporting for this story took place during the meeting.





Having focused on aquatic animals for most of his career, four years ago Dr. Temple launched Azul Optics (Bristol, United Kingdom) after discovering that the technology he was using to test polarized vision in cuttlefish could be adapted to test polarized vision in humans. *COOKIE's* writers were fascinated with the doctor's career transition and eager to learn more, invited him to tell us what his discovery meant for eye health.

### MP-eye: Origin story

"I developed the core technology for this device by mistake. It was originally designed to measure octopus vision but I noticed, during the experiments, that I could see interesting patterns when looking at the polarized light fields." Dr. Temple shared. Excitedly, he remarked that "it was serendipity." The device, deemed the "MP-eye," is able to determine the state of a patient's macular pigments by checking their sensitivity to polarized light.

Humans see polarization as a visual phenomenon called Haidinger's brushes, a faint yellow bowtie or hourglass-shaped perception, caused by the shadow formed on our retina by macular pigments. Azul Optic's MP-eye, measures a person's ability to visualize these bowties, thereby measuring their macular pigment levels. With this information eye care professionals can create a plan for preserving patients' macular vision.

We can't do much about the main cause of age-related macular degeneration (AMD), which is, of course, age. Nor can we do anything about genetic predisposition. Aside from that, we can — within reason — limit exposure to light from the blue end of the visible spectrum and maintain macular density.

Dr. Temple asserts that not enough

# From the "Big Blue" to Blue Light

by Elisa DeMartino

Linguists and historians have no shortage of theories to explain why the Iliad and Odyssey likened the color of the Mediterranean to dark wine 3,000 years ago. Ancient Greek, as well as ancient Japanese and Hebrew, for a long time lacked a word to distinguish "blue" separately from other colors. Having grown up with the modern color wheel, we may never quite understand why color perception then was different from ours today. However, we can be fairly sure, at least, that ancient humans were not suffering on a large scale from early

macular degeneration — and that they weren't all secretly octopuses.

Many people know that the octopus can mimic background colors to blend in with its environment, but what they don't know is that it does so despite being colorblind! Instead, these cephalopods can discern what we can't see so well: polarized light. By studying octopus and cuttlefish vision, Visual Ecology Expert Dr. Shelby Temple has brought us closer to understanding human macular pigment.





attention is given to photochemical damage inflicted by blue light. While controlled, long-term studies on humans are all but impossible to carry out due to the length of time and imposed subject damage necessitated, there have been short-term epidemiological studies on animals demonstrating the causal relationship between blue light and AMD. He implores his audiences to explore the abundant research available on the topic, as well as recent official government reports to get a jumpstart on preventative eye care. As we know today, there was evidence that smoking caused cancer long before the fact was made mainstream in society.

Azul Optics also wants to help bring awareness to patients about how to take care of their eye health. It's easy for people to ignore generic advice about health issues that won't affect them until decades into the future. Providing an individual with a concrete number that assigns specific, personal risk to them may incline them to take precautions against risk factors: "We like numbers ... so we've created a number system to tell people how at risk they are. It's basically measuring their natural, internal sunglasses," shared Dr. Temple.

## Mitigating eye harm

"We can't stop age-related macular degeneration; it's a natural process of aging," continued Dr. Temple. He advised that if precautions are taken throughout a person's lifetime to mitigate blue light's impact, AMD's onset can be delayed to as late as 120-years-old. "Well, it doesn't matter then," Temple went on humorously, "you prevented it because it didn't happen in your lifetime."

Avoiding blue light completely is impossible without committing to a lifestyle underneath a rock at the bottom of the ocean. Almost everyone is guilty of being lazy about sun protection sometimes. Yet not everyone realizes that the biggest natural source of blue light is the sun. People often

worry about UV light, not knowing that the next most energetic waves on the spectrum reach the back of the eye. If eye patients are made aware of the direct connection between sun exposure, blue light, and AMD, they'll be more likely to remember their hat and sunglasses before leaving the house.

Moreover, even when we're inside, and even when the sun is down, we have electronic device screens and LED bulbs glowing around the clock. Cityscapes incorporate more reflective surfaces (e.g., cars and skyscrapers) that beam light directly into our faces without shade. This increased blue light exposure, combined with rising average lifespans, means people nowadays are more likely to experience AMD at some point in their old age compared to the past.

With COVID-19 keeping us indoors, we're meeting online with friends and coworkers, watching more TV, and using our screens constantly to shop or order food. Now more than ever, it is critical for people to be aware of their macular pigment health. The first adjustment recommended by Dr. Temple starts with screen exposure.

Patients need not immediately stress out about less screen time (a worthy goal, but a difficult one to sell to anyone). Rather, they can change the level of exposure by simply lowering their computer or phone brightness and adjusting color temperatures to be warmer. When they must use their electronic devices, blue light lenses (or even amber or yellow-tinted sunglasses) filter a percentage of the rays and work best in combination with other light reduction techniques.

Patients should also be aware of their diets. Most people don't get enough lutein and zeaxanthin through fruits and vegetables. Eating dark green and bright colored fruits and veggies like kale, spinach, oranges, peppers, pumpkin and corn builds up natural macular pigment protection.

Antioxidants also stop cells

from accumulating damage that could eventually lead to macular degeneration. Regularly incorporating dietary antioxidants through food or tea is therefore beneficial in the long haul for a patient. Smoking, in addition to its other detrimental effects on the eyes, limits the effectiveness of these helpful antioxidants.

"We want to inform people from as young as possible. That's one of the things I love about our device. We can test people at the age of 5 and we can find out what their pigments are at a really young age. And the younger we find out, the more time people have to protect themselves. The more time they have to put in place these really simple measures," said Dr. Temple.

After all, once retinal cells are dead, they're gone for good. With this in mind, Dr. Temple doesn't want to terrify patients into obsessing over blue light. He hopes the MP-eye device will be used to assess and track macular pigment density over time, much like numbers on a scale are used to measure weight. He urges that the best method is to take all the easy precautions and to be aware of macular degeneration before it becomes a threat to eyesight. 🙄

## Contributing Doctor



**Dr. Shelby Temple** is a visual neuroscientist from the University of Bristol and is the co-founder/director at Azul Optics. His research led to the invention of a new ophthalmic instrument (MP-eye) that detects a risk factor for age-related macular degeneration (AMD). His success in commercializing the MP-eye led to him receiving the Innovator of the Year Award from the UK Biotechnology and Biological Sciences Research Council. Dr Temple develops and delivers education and training courses on the dangers of blue light and reactive oxygen species as well as how macular pigments protect the retina from photochemical damage and help prevent AMD.

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somewhere between 70 and 85%,” he said.

Arkon went on to examine some of the best benchmark levels for an optician’s clinic, like a top target 15% for payroll expenditure, and 38% for frame and lens expenditure. The overarching theme of the presentation was balancing — for example, how to balance the various aspects of optical practice to ensure a healthy and efficient practice. Arkon went into detail on more areas of note, including niche areas in optical practice like digital flat tops and Trivex sales.

Sales are obviously an area of concern to opticians which is why Arkon focused particular attention here. He recommended that his audience focus attention on creating specific benchmark profit levels for each product they sell. In particular, and perhaps unsurprisingly, standard glasses were the most important.

“The formula that we will use is total eyeglass — that is the total revenue of eyeglasses divided by the total number of complete pairs sold on average. The benchmark should therefore be about US\$380 on average for an ophthalmology practice, with our best-in-class clients coming in at around US\$500,” Arkon said.

“After this, what are your next steps? I would recommend that you begin to gather analytical data from your computer system. Second, compare your data to the benchmarking standards that I’ve introduced in this presentation. Third: Identify which areas are underperforming and identify those as improvement areas. Fourth, develop an action plan,” he concluded. 🍀

**Editor’s Note:**

The American Academy of Ophthalmology annual meeting (AAO 2020 Virtual) was held from November 13 to 15, 2020. Reporting for this story took place during the event.

# AAO Presentation Outlines Top Optical Benchmarks

by Andrew Sweeney

When we think of attending a major ophthalmology conference, we tend to think of marque seminars on various diseases and patient studies. These can include some of the most exciting cases to learn from in our industry — but other issues, which often get less attention, are just as important. A clinic cannot, for example, provide excellent patient care if it is run in a low-quality manner.

This is why some of the less well trumpeted, yet fascinating, presentations often focus on management issues, such as personnel training and proper record keeping. In this vein, *Setting and Using Effective Benchmarking Standards for Your Optical Dispensary* was a standout at the American Academy of Ophthalmology (AAO 2020 Virtual) conference last November. This presentation was given by Aron Arkon, a senior consultant at Arthur De Gennaro & Associates, South Carolina, USA.

## Increasing efficiency and profitability

The presentation focused on how clinicians can identify inefficiencies and determine profitability in optical dispensaries. Arkon points out that “very little or no specific data exists for the ophthalmological space.” Based on the average rate of optical store revenue of US\$255,000, Arkon extolled the importance of a healthy patient capture rate.

“The capture rate allows you to forecast the revenue volume for your dispensary. All exams that generate a prescription (Rx), 30 day post-ops and all other Rxs generated are divided by captured daily Rxs, plus returning patients, plus outside Rx, which equals the daily capture rate,” Arkon said.

“We want to start with 50%, although many practices fall below that level. Our target benchmark for our clients is 65%. And the best cases average





# COVID-19: It Came in Like a Wrecking Ball

## Impacts in optometry from around the world

by Brooke Herron

For optometrists, opticians and other eye care providers, COVID-19 came in like a wrecking ball — smashing through previously held beliefs and business strategies.

Depending on geographic location, optometrists and other eye care professionals have had different experiences during the pandemic. Some countries locked down quickly and effectively, and now, enjoy a relative return to normality. On the other hand, countries that did not lockdown or impose strong restrictions, continue to see increased COVID-19 infections.

However, even in countries that enjoy a relatively COVID-19-free existence (like Vietnam and New Zealand, for example), the “rules” of optometric practice and education have still been fundamentally impacted.

Patient behavior has changed; even in “safe” countries, those who are immuno-compromised or elderly may not be as keen to seek out vision care. Plus, patients will need additional reassurance that all safety measures are followed.

Costs have gone up for practitioners, too. Due to safety and social distancing regulations, there are fewer patient appointments. Plus, procuring PPE,

disinfectant and other supplies to ensure safety all have a price — and surely, many clinics lost revenue when they closed during lockdowns.

But in the debris of what was, a new normal is slowly taking shape. And in this period of uncertainty and change, one thing is certain — flexibility is key, and the necessity and ability to adapt to ever-changing circumstances has become remarkably clear.

### Virtual insight from Thailand

One notable change is the acceptance of telehealth systems. More, now than ever, patients and physicians alike are embracing digital technology to pre-screen, monitor and educate patients.

Annual meetings and conferences have also gone virtual, which has allowed learning and information sharing to continue at a global level. This includes the Asia Optometry Conference (eAOC 2020 Virtual), which was held in November 2020.

One of the conference’s presenters was Danai Tonkerdmongkol, O.D., who discussed optometry’s response to COVID-19 in his home country of Thailand.

“In the beginning [of the pandemic], there was a lot of confusion ... there was a lot of panic and rumors as usual,” began Dr. Tonkerdmongkol. He said that although there was evidence that COVID-19 arrived in Thailand in December 2019, the government was slow to take action.

Then on March 17, the Thai government closed its borders — like many other countries worldwide. At this point, all health care services were deferred, unless they were COVID-19-related or life-threatening emergencies.







To help, the Association of Thai Optometrists worked with the Ministry of Public Health throughout the COVID-19 pandemic to issue guidelines and screening protocols for opticians, optometrists and eye care providers.

“In the beginning, the cases were not that widespread and we thought that there was not much of a problem in the general population,” continued Dr. Tonkerdmongkol. This from December 2019 to March 2020, when COVID-19 was just getting its bearings in Thailand.

“After the government announced an emergency situation, the Association quickly responded with recommendations for optical and optometry practices that could still maintain public functions,” he said. By the end of April, Dr. Tonkerdmongkol said that the situation had improved, with cases dropping to less than 100 per day. By May, new cases were nearly non-existent.

“During that time, the Association consulted with virologists and epidemiologists to design more comprehensive solutions and publish the New Normal Optometric Care Standard for Prevention of COVID-19,” said Dr. Tonkerdmongkol, adding that they continue to use this standard-of-care today which is based on all they’ve learned throughout the pandemic. “Of course, we would like to share this with everyone.”

### Enhanced safety measures remain critical

Kristie Nguyen, O.D. is an optometrist in Florida, USA. Currently, the United States leads the world in COVID-19 infections and deaths. To continue operations, enhanced safety measures have been instituted throughout the entire patient process, from check-in to check-up.

Today, many of these precautions

are common in optometry offices everywhere: In the waiting room, there are fewer seats to allow for social distancing; accompanying family members are limited; and if possible, only the patient is allowed in the examination room. These combined efforts aim to reduce exposure, shared Dr. Nguyen.

Masks are, of course, a requirement. However, although they help reduce the spread of COVID-19, they can cause hassle in the exam room. “There are a lot of steamed lenses during refractions, slit lamp evaluations and dilated fundus exams. This is because the masks are not fully airtight,” she explained.

Further, Dr. Nguyen said they’ve increased their PPE supplies and of course, thoroughly disinfect everything between patients. “We’ve installed extra shields for slit lamp evaluations and dividers to protect our front staff from patient interactions when they enter the office,” said Dr. Nguyen. “Plus, temperatures are screened for each patient.”

As noted above, the added cost of PPE and the lower number of patients has affected the clinic’s bottom line. But as they say, “when one door closes, another opens.” As such is the way in today’s world. Dr. Nguyen said they’ve used this opportunity to opt for more retinal imaging to avoid close contact while examining the posterior segment. They have also embraced online registration to reduce time spent in the office filling out paperwork.

“We are also moving toward more digital efficiency,” she added.

### Long-term impacts for eye care professionals

While everyone is doing their best, these extra precautions coupled with patients’ unwillingness to come into the office for treatment, means that some conditions are getting

progressively worse.

This was noted by one study out of Singapore.<sup>1</sup> Although the authors expressed worry about ophthalmic resources being overstretched as restrictions ease and patients return, they were more concerned with vision implications. “More sobering is the real possibility that some patients may suffer permanent vision loss because they were unable to receive timely care during this pandemic,” noted Khor et al.

The next generation of eye care professionals are also taking a big hit: “Residents and fellows have suffered in all aspects of their training, including disruptions to formal didactic teaching, a lack of clinical exposure, and a drastic reduction in surgical numbers,” stated Khor et al.

The authors note that other than COVID-related projects, almost all other research activities have been suspended — this will negatively impact ongoing eye studies and trials, and has given rise to worries about retaining researchers and staff as research funds inevitably run dry.

### The mental burden of COVID-19

COVID-19 has affected just about everything, from increased safety precautions and digital platforms, to clinic closures and the halting of research ... the list goes on. So, it’s no wonder that mental health is affected, too.

According to Khanna et al., there is already much data on the impact on health professionals in China: One study reported that among medical and nursing staff in Wuhan, 36.9% had subthreshold mental health disturbances; including 6.2% that were severe.<sup>2</sup>

Therefore to take a deeper look at the psychosocial impacts of COVID-19 in





India, Khanna et al., surveyed 2,355 ophthalmologists and ophthalmologists-in-training in 10 states.

“To a question on the effect of COVID-19 on their training or professional work, 1,244 (52.8%) felt that COVID-19 would have a considerable or serious effect on their training or profession. Regarding financial implications, 869 (37%) had difficulty in meeting their living expenses,” stated the study’s authors.

Further, they found that 765 (32.6%) had some degree of depression: mild 504 (21.4%); moderate 163 (6.9%); and severe 101 (4.3%). “This was much higher than the 10% prevalence for common mental disorders reported from the general population in India,” Khanna et al. noted somberly.

Numerous factors influence this high level of depression: a generalized pervading climate of uncertainty among the ophthalmologists, triggered by the limitations in training and job security; fear of COVID-19 and its severe symptoms in some individuals; lack of availability of PPE and of adequate care in hospitals; and a shortage of ventilators and intensive care unit beds if someone were to contract the disease. Respondents were also concerned with bringing the infection home to vulnerable family members.

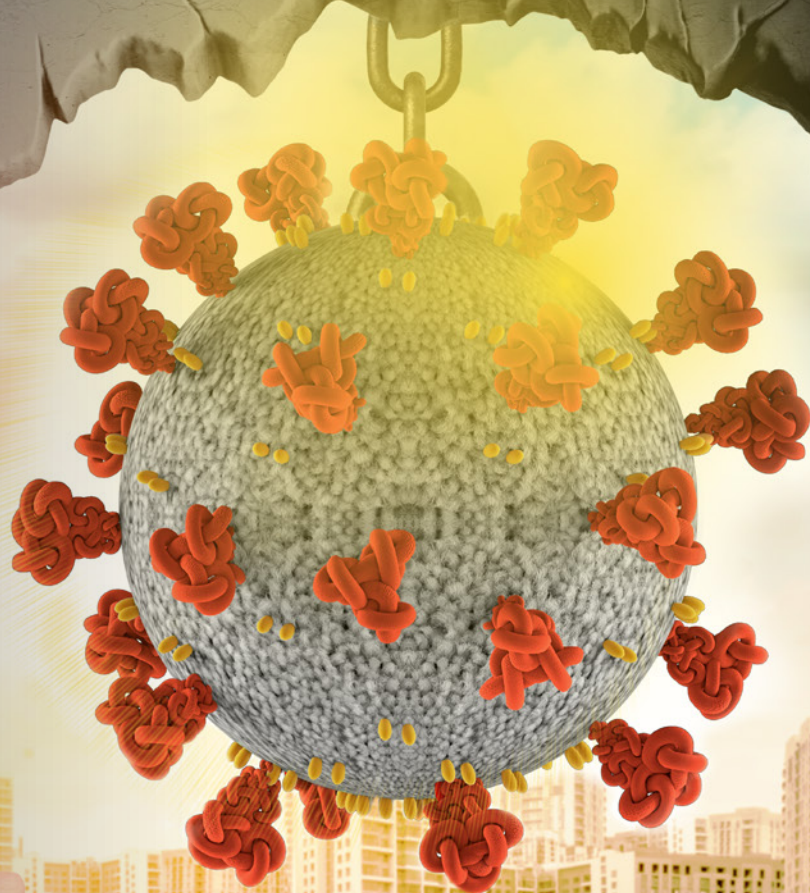
The study also noted that there is an “anticipated decrease in footfalls for availing eye care services, so there is likely to be a sense of [financial] insecurity among these ophthalmologists.”

And although today, much uncertainty still remains — there is hope. Several vaccines are now in-use and in-development with varying degrees of

efficacy; and as more of the world’s population is vaccinated, we should slowly see lessening restrictions. Will the world ever return to the pre-pandemic normal? This writer thinks not — but is optimistic that brighter days are indeed ahead for eye care professionals in Asia-Pacific, and for people the world over. 🍀

#### REFERENCES:

1. Khor WB, Yip L, Zhao P, et al. Evolving Practice Patterns in Singapore’s Public Sector Ophthalmology Centers During the COVID-19 Pandemic. *Review Asia Pac J Ophthalmol (Phila)*. 2020;9(4):285-290.
2. Khanna RC, Honavar, SG, Metla AL, et al. Psychological impact of COVID-19 on ophthalmologists-in-training and practising ophthalmologists in India. *Indian J Ophthalmol*. 2020; 68(6): 994–998.



### Contributing Doctor



**Dr. Kristie Nguyen** is a board-certified optometrist. She currently serves as a contract doctor for Perez and Associates and Phan-Tastic Eye Care in Altamonte Springs, Florida, USA.

After graduating in the top 10 of her high school class with honors, she went on to obtain her Bachelor of Science degree from the University of Houston, Texas. While at U of H, she volunteered at a local hospital and worked as an optometric assistant. Dr. Nguyen obtained a Doctorate of Optometry (O.D.) in 2005 from Nova Southeastern University College of Optometry in Fort Lauderdale, Florida. She conducted her medical internships at the Chickasaw Nation Health Clinic in Ardmore, Oklahoma and the Lake Mary Eye Care in Lake Mary, Florida.

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# The Roller Coaster Ride of 2020

Enjoy a complimentary slice of CAKE in COOKIE

One thing is for certain:

2020 was one roller coaster of a year. Now, as we embark on a new year, many of the previous year's challenges persist — the main challenge, of course, is COVID-19 and its related consequences.

Throughout 2020, Media MICE CEO Matt Young kept in virtual touch with both surgeons and ophthalmic industry partners as part of the Q&A from Quarantine video series.

Below, we take a look at some of those highlights.

## On twists and turns:

"We're very committed to doing the right thing. It's a privilege for a company to be in a position where we can allocate our resources in this way."

— Scott Korney, COO, Avellino

"I honestly don't think we will come out of this and go back to the way that we were living. The idea of getting on a plane to go to a meeting and sit down in front of somebody, then discuss business as before is almost unthinkable."

— Kuntal Joshi, director, Asia -Pacific, SIFI Group

"[Practices should] stay solvent and look carefully at cash flow because it is going to be somewhat reduced. Now is not the time to go out and make a major purchase. I think that's also going to impact the industry a little bit and that many of us probably won't be buying the next instrument or diagnostic device right away ... most of us are going to be pretty careful about capital expenditures."

— Dr. Richard Lindstrom, founder and attending surgeon, Minnesota Eye Consultants, USA



## On reaching new heights:

“Smart people who utilize this time and reinvent themselves probably will create new business models to add value to customers. [For example], in optometry, going away from lenses and frames to focusing on healthcare is a business model people should look at. From an ophthalmology point of view, business will have to go back to normal because patients will still need care.”

— **Shane Hage, regional director for Asia-Pacific, Icare Finland**

“You can do an awful lot without being in the office, and I think that’s going to be the new norm going forward. We are going to be living in a new era post-COVID. And I think it’s been a big eye opener for all of us, the whole world. Virtual care is going to become a standard of care for a lot of us. It’s not going to ever fully replace being in person — obviously we still have to do surgery, we still have to see people for certain things — but we’re going to be doing a whole lot of virtual visits. I find it to be very intriguing, very fascinating, and I certainly hope to help innovate it to some degree in this field going forward.”

— **Dr. Christopher Starr, ophthalmologist at Weill Cornell Medicine, New York, USA**

“We’re trying to look at what we can do to support our customers, ophthalmologists and patients. And I think we’ll end up with a bunch of best practices that we’ll continue to provide. [Medications to lower treatment burden] are going to be a major focus for our research and development teams... to look at areas where we can actually help ophthalmologists and patients to relieve burdens. I think that if you look over the next five to 10 years, the products coming from Allergan will have a major focus on lessening burden and helping patients.”

— **Charles Holmes, former associate VP and former head of Eyecare Global for AbbVie**

## Editor’s Note:

This infographic was reprinted from *COOKIE*’s sister magazine, *CAKE* (Cataract - Anterior Segment - Kudos - Enlightenment). After *COOKIE*, enjoy *CAKE* at [www.cakemagazine.org](http://www.cakemagazine.org)

## On ups and downs:

“A lot of the dry eye procedures are premium, cash procedures. Now, patients may say that ‘I’m going to use artificial tears, warm compresses, baby shampoo, tissues, etc.’ — then I might think about paying for a more premium procedure. As for cataract surgeries, you’re still going to have the Baby Boomers who are retired and whose finances didn’t really take much of a beating, unlike the working class — those of us under 65 to 70-years-old who are working toward retirement. I think that it will be the younger group that will be more conservative, financially. Those who are 40 to 50-years-old, they might not be coming in for LASIK or LipiFlow as often.”

— **Dr. Francis Mah, advanced corneal, cataract and refractive surgeon, California, USA**

“How do you stay in touch with surgery when you’re not in the operating room as much as you want or need to be? There is a lot of anxiety about this — and there’s a lot of different ways we’re adapting to it. I tell people it’s like riding a bike: You’re gonna be okay. You’ll feel funny for your first couple of days back and then you get right back to it. We’re making sure that when there are surgical cases, our residents and fellows are in the operating room, so that they’re getting exposure to the limited amount of surgery that’s going on right now. For young eye surgeons that is by far the biggest concern that they’re facing during the COVID-19 pandemic, preserving their surgical skills.”

— **Dr. Julie Schallhorn, ophthalmologist, San Francisco, California, USA**

“In order to launch a product, historically, it required having individual conversations, professional education discussions, etc. Typically, these things happen at an in-person congress such as ASCRS, where we had plans to launch some products. Along with the safety of our people, having the right empathy for our customers is also very important. We would much rather try to understand how we can partner today and prop up ophthalmology. Then we can come together and help patients as we go forward — that is really the focus for us, and I want to make sure that our customers hear that.”

— **Warren Foust, worldwide president, surgical vision, Johnson & Johnson Vision**



# Making a Difference You Can See

Providing crucial eye care to underserved populations *by Brooke Herron*

According to OneSight.org, 1 in 7 people worldwide lack access to vision care — and there are various reasons for this. For example, the nearest eye clinic may be too far away to visit; it could be too expensive; or there may be other barriers to care.

We know that uncorrected visual errors and eye disease not only lower quality of life, but also can impact a person’s ability to earn an income. Meanwhile, school-aged children may encounter difficulties in learning due to poor vision. Combined, this creates a continuous cycle of disability-induced poverty.

Thankfully, there is hope: OneSight is a non-profit organization that focuses its efforts to provide the solutions, people and resources to help resolve the vision crisis — permanently. To date, OneSight has brought eye exams, glasses and permanent vision centers to the most vulnerable places and

populations. This includes 37 million people served in 53 countries thus far, thanks to support from donors, volunteers, partners and sponsors.

## Volunteer spotlight: Helping others see

Florida-based optometrist Ray Whetstone O.D., has been volunteering with OneSight since 2012. With nearly a decade of service, he has traveled with OneSight throughout the United States, Central and South America and Asia to help patients in underserved regions.

“I did my first trip with them in 2012 to a Native American reservation in South Dakota,” shared Dr. Whetstone. “All in all, I have been on eight domestic trips and seven international trips, visiting countries including Mexico, Nicaragua, Bolivia, Peru and Thailand.”

Dr. Whetstone has a history of doing charitable work. Prior to volunteering with OneSight, he traveled to Honduras with a team of 70 medical professionals, which included medical doctors, optometrists, dentists, chiropractors, nurses and pharmacists.

“We took over a school and set up a clinic ... and as you can imagine, we did the whole thing,” he said. “We had tons of medical supplies that were donated by large companies,” said Dr. Whetstone, adding that at that time, the eyeglasses they used were recycled.

It was a new experience for Dr. Whetstone in Honduras. There, he saw a pathology he had only read about in school, and experienced firsthand how a simple pair of spectacles could dramatically alter someone’s life.

“Of course, I had my own personal experience of getting glasses in third grade ... I had no idea how nearsighted





I was until I put on the glasses!” he said.

“Of course, I had my own personal experience of getting glasses in third grade ... I had no idea how nearsighted I was until I put on the glasses!”

“Professionally, I love watching the transformation of people — especially teenagers — when you put them into contact lenses and their whole personality blossoms,” shared Dr. Whetstone, noting that although they weren’t prescribing contact lenses in Honduras, they were changing lives nonetheless.

## Of spectacles and sunglasses

In addition to eye glasses to correct refractive errors, Dr. Whetstone said that sunglasses are greatly needed as well.

“If I could waive a magic wand, the ability to provide sunglasses to everyone we see would be ideal,” he shared. “Most of the places I’ve been, the sun damage to the eyes is mind boggling —

there is scar tissue on the front of the eye, as well as ‘early’ cataracts.”

In addition to the disease itself, this can cause a host of other challenges: For example, it’s unlikely that patients in these communities can afford or access medical or surgical care — and thus, quality of life decreases further.

“The last [OneSight] trip was to the interior of Peru, deep in the jungle ... and the incidence of cataracts in young people was very high,” he said. “I came home bent on finding a way to make surgery happen — but then COVID hit and things are at a standstill.”

## Saving sight through outreach

There are numerous outreach organizations within the optical industry, said Dr. Whetstone, whose office also supports local and U.S.-based organizations like St. Matt’s House, the Red Cross and the Women’s Shelter. “Anyone who is interested just needs to search and opportunities can be abundant,” he continued.

“What I liked about OneSight is that they saw the need to change the process,” continued Dr. Whetstone. For example, they began making spectacles in the clinics rather than using recycled pairs. This, of course, makes it much

easier for optometrists to match the prescription to the patient’s needs.

In addition, he said that OneSight is also adept at partnering with the local health ministries in the countries where they operate. This ensures they have the resources they need to serve patients.

Around the world, OneSight holds charitable clinics, which are designed to meet urgent unmet needs, and creates sustainable clinics, which are a permanent solution. Charitable clinics last one week to serve those with acute needs; while sustainable clinics offer a long-term solution in the community. In addition to providing vital access to vision services, the permanent sustainable centers also create jobs.

The nonprofit plans to continue its commitment to serving all of the world’s 1.1 billion people who are in need of eye exams and spectacles.

In Asia, outreach includes 85 charitable clinics and 76 sustainable centers. These provide millions of people with eye care in countries including: Thailand, Vietnam, Bangladesh, East Timor, Indonesia, Malaysia, India and China. 🌐



A simple pair of eyeglasses can drastically improve a person’s quality of life.

## Contributing Doctor



Dr. Ray Whetstone has been in private practice at Whetstone Eye Care in Naples, Florida since 2011. Dr. Whetstone was an independent contractor from 1994 to 2011 and prior to that, he practiced at Las Olas Eye in Fort Lauderdale, Florida from 1991-94. He also served as clinical director at Johnson Eye Institute in Zephyrhills, Florida for one year and he was self-employed in Cape Cod, Massachusetts from 1985 to 1990. Dr. Whetstone received a Bachelor of Science in psychology from Penn State. He completed his Doctorate from New England College of Optometry and did his residency at the University of Massachusetts Amherst. He has been a member of the American Optometric Association (AOA) for 30 years.

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# IAPB & WHO

## Working Toward Integrated, People-Centered Eye Care *by Chow Ee-Tan*

An integrated, equally distributed, people-centered eye health system is the way forward, and the government should put people and community — not diseases — at the center of health.

This is the message from Dr. Amanda Davis, regional chair of the International Agency for the Prevention of Blindness (IAPB), Western Pacific, in her welcome message at the 2020 Asia Optometry Conference.

Founded in 1975, IAPB is the premier eye health body that brings together a network of 160 member organizations from around the world. One of its important roles is to create

and disseminate knowledge and to be a facilitator and key partner to many agencies, regionally.

Recently, it has formed an important partnership with the World Health Organization (WHO). The partnership resulted in WHO releasing its first-ever World Report on Vision in 2019, which provides a comprehensive overview of eye health worldwide.

The report provides recommendations and strategic framework to guide action at the national, regional and global level for the next decade, said Dr. Davis, who oversaw the growth of the IAPB's public health division and also assisted in the development of eye

care services in 54 countries.

Dr. Davis said the report provides a critical moment to inform and persuade global leaders about the magnitude and unacceptability of vision loss globally. Thus, the finding is very relevant to the region — and also to the conference.

### Lower income areas bear the burden

The report showed that at least 2.2 billion people worldwide have vision impairment.

“Out of these, at least one billion have vision impairment that could have been prevented or have yet to be addressed,” she said, adding that people in low- and middle-income countries are four times as likely to have vision impairment.

“This is the challenge that we are facing. We know that one-third of the world population is impacted, and services are out of reach for eye care because the facilities and welfare is





unfairly distributed or inaccessible,” said Dr. Davis.

She said there are many vulnerable individuals who fall into the marginalized group in society.

“Most of them just need glasses, some need low-cost surgery and others to see a doctor regularly. This vulnerable group includes women, older people, people with disabilities, ethnic minorities and indigenous people,” she said.

## Lighting the way ahead

In her address, Dr. Davis proposed the way forward, which she said is a result of concerted efforts in the last 30 years to create an integrated, equally distributed and people-centered health system.

“Governments need to integrate eye care into health services. We need to build a strengthened health system — where health and services include treatment, early detection and prevention,” she said.

She also elaborated on what integrated, people-centered eye-care means, which hinges on three key interrelated areas.

“An integrated, people-centered eye care service recognizes the continuous need at the stage of promotion, prevention, treatment and rehabilitative intervention.

“It drives all areas of health care and coordinates eye care services across and beyond the health sector to other sectors. More importantly, it recognizes that people have different needs in eye health that change throughout different stages in their life,” said Dr. Davis.

She then spoke on four key strategies required to implement integrated, people-centered eye care (IPEC).

First and foremost, she said any strategy taken must empower and engage people and communities.

“Empowering and engaging is about enabling people and caregivers to be effective users of health care services, and ensuring that they have the right information and education to embrace

preventative services and access treatment and rehabilitation,” she said.

Secondly, it must involve reorienting the model of health care to ensure eye health is integrated into all primary health; aiming at individuals through primary care and population-based interventions.

“We need to increase the adaptability of health systems, while changing demographics and lifestyles, pertinent to this region. Reorienting also focuses on continual care and preventive intervention that are more cost-effective to lead to improved health,” she said.

Next, implementation must include coordinating services within and across sectors. Pace management and team-based care require a viable health network by integrating medical programs into health programs. And this includes linkages between various health care areas.

“It is also critical to include those outside of the health sector — such as social services, governance, finance and education. This is primarily a government and leadership issue requiring strong actions to coordinate an intersection,” she stressed.

Last but not least, Dr. Davis spoke on creating an enabling environment which is based on WHO’s policy working alongside leadership and governance, and focused on information data, workforce and health system financing to ensure access to all essential sectors.

While all these are important strategies, Dr. Davis said we could do something now to make it happen.

She said that both the public and private sectors should invest more in eye health to integrate and scale-up people-centered eye care.

“Make eye health an integral part of Universal Health Coverage; reframe eye health within the SDG Framework to ensure that it addresses the changing demographic.

“We should help the vulnerable and leave no one behind. We need to strengthen monitoring and accountability and always work together

with one another,” she said.

One of the main roles of IAPB is advocacy, she said. IAPB works to raise the profile of eye care with key international institutions and receives the attention and resources needed to achieve universal access to eye health. The agency works with many countries to advocate and help raise awareness.

“We are facilitating our members to work with local governments, to assist implementation and to ensure that our members are well-informed and connected. And we do this at national, regional and global level,” she said.

The agency’s roles include providing data and information to enable access to up-to-date knowledge, information and practice. It plays a part in strengthening networks and supporting active partnerships between members and other key sectors.

“IAPB also establishes a baseline for strategy set-up and facilitates communication at international forums. A global-level mechanism is crucial for holding stakeholders accountable,” said Dr. Davis.

She said IAPB helps coordinate the launch of the World Report on Vision and continues to champion and draw attention to the Report, as well as the WHO to develop technical tools and accountability framework.

“We at IAPB believe that no one is needlessly visually impaired. Everyone should have access to the best possible standard of eye health; and those with irreparable vision loss can achieve their full potential,” she concluded. 🍀

**Editor’s Note:**

This Asia Optometric Congress (eAOC 2020 Virtual) took place from November 18-19, 2020. Reporting for this story also took place during the virtual congress.



# New Treatments Emerge in Dry Eye Disease

by Andrew Sweeney



Of all of the maladies affecting the eye, dry eye disease (DED) is among the most common.

It's characterized by a loss of homeostasis in the tear film and is accompanied by ocular symptoms; tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities all play etiological roles in DED. The stinging, redness and sensitivity to light caused by DED can be extremely unpleasant for patients, and in severe cases restriction of daily activities, pain, decreased wellness, and impairment of general health can occur.<sup>1</sup>

And for physicians, it can be difficult to manage. According to *Current Management of Dry Eye Disease*,<sup>1</sup> the management of DED is highly complicated because of its multifactorial etiology which is

associated with many mechanisms. Therefore, clinicians should clearly determine the underlying etiology and differentiate between the two forms of DED: aqueous deficient dry eye (ADDE) and evaporative dry eye (EDE). This classification is often used to diagnose and identify the treatment modality.

## No more tears

Traditional dry eye treatments have generally been limited to over-the-counter artificial tears, warm compresses, and lid hygiene with baby shampoo. And according to *Advances in Dry Eye Disease Treatment*,<sup>2</sup> even though topical cyclosporine (CsA) has a long track record in dry eye treatment, questions still surround its use. These include: optimal concentration/dose, necessary length of treatment, and which patients are most likely to benefit from its use. The same study

has welcomed the increase in the development of therapies that target meibomian gland dysfunction (MGD) and DED, and the use of biologic and biologically derived products (i.e., blood serum and plasma, amniotic membranes and naturally occurring glycoproteins).

Clearly there is a groundswell of development in the study and treatment of DED, a development that should be welcome as both beneficial for patients and fascinating for study. At the American Academy of Ophthalmology (AAO 2020 Virtual) meeting held in November, DED was one of the main conditions given center stage for study and discussion. One of the standout presentations on this subject was *Step-by-Step Management of Dry Eye Disease*, which was still available to view on the AAO 2020 Virtual portal at the time of writing.





## Check your genes and get off the tablet

The symposium kicked off with a presentation by Dr. Vatinee Bunya from Penn Medicine in Philadelphia, Pennsylvania, USA. Dr. Bunya focused on dietary and lifestyle modifications in the management of DED in two key areas, namely screen usage and environmental factors.

Pointing to a decreased blink rate and increased incomplete blinks caused by excessive screen use, she recommends patients instill artificial tears and follow the 20-20-20 rule, (look at something 20-feet away for 20 seconds, every 20 minutes). She also recommended patients use humidifiers, and prevent evaporation via wrap around goggles/ glasses.

In addition, she said the efficacy of using Omega-3 tablets, which have become popular to alleviate the symptoms of DED in the lay community, was not proven and required further research.

Dr. Victor Perez, a professor of ophthalmology at Duke University (North Carolina, USA), spoke about some interesting findings regarding the genomes of DED patients. He reported that his clinic routinely tests patients who are suffering from dry eye with prominent inflammation in the Matrix metalloproteinase-9 (MMP9) gene. Dr. Perez said it was striking that of the patients who presented with an auto-immune component of DED tested 100 percent positive for the presence of MMP9; non-auto-immune patients also frequently test positive for the condition, up to 67 percent. He also reported that MMP9 positivity is correlated with decreased tear production.

Dr. Deborah Jacobs from Harvard Medical School (Massachusetts, USA) reported on the relation between contact lenses and DED, and how to choose the best lens. She said that when choosing a soft therapeutic lens, it should be FDA approved for therapeutic use in extended wear mode, recommending Air Optix Night & Day (Alcon; Geneva, Switzerland), Acuvue Oasys (Johnson & Johnson; Jacksonville, Florida) and PureVision



There's a guy who lives here who likes blood treatment too.

(Bausch & Lomb; Rochester, New York). She recommended against using "dailies" type lenses.

Dr. Jacobs also spoke about PROSE treatment, the prosthetic replacement of the ocular ecosystem developed by BostonSight as an alternative to corneal transplantation. She said that in one study, 75 percent of patients were reported to still wear the implant after six months, and that change in visual function was VFQ-25 >+20 points six months after PROSE treatment was applied.

## Blood: Not just for vampires (or hematologists)

Dr. Bennie Jeng, a professor of ophthalmology at the University of Maryland (USA), gave a presentation on the use of autologous serum, eye drops and other blood products to treat DED. Pointing to *Long-term Use of Autologous Serum 50% Eye Drops for the Treatment of Dry Eye Disease*, Dr. Jeng stated that DED patients saw improvement in their corneal fluorescein staining, Shirmer and ODCI scores without complications via the application of autologous serum.<sup>3</sup>

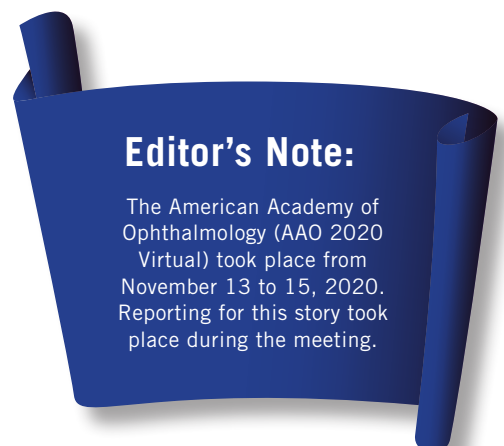
He said that some of the outstanding issues regarding the use of autologous serum include how best to process it (centrifugation time and speed plus clotting time) and its optimal concentration. Dr. Jeng concluded by stating that more investigations into the components of autologous serum that

are most efficacious, should be carried out.

From available research, along with the dual improvement in treatments and the increase in treatment options, DED outcomes are likely to improve. From this writer's perspective, it will be interesting to see how these innovations will unfold in the future. Given the commonality of the condition, even the slightest development in DED research will have tremendous benefits for millions of people. 🍷

### REFERENCES:

1. Şimşek C, Doğru M, Kojami T, Tsubota K. Current Management and Treatment of Dry Eye Disease. *Turkish J Ophthalmol.* 2018;48(6):309-313.
2. O'Neil EC, Henderson M, Massaro-Giordano M, Bunya VY. Advances in Dry Eye Disease Treatment. *Curr Opin Ophthalmol.* 2019;30(3):166-178.
3. Hussain M, Shtein RM, Sugar A et al. Long-term Use of Autologous Serum 50% Eye Drops for the Treatment of Dry Eye Disease. *Cornea.* 2014;33(12):1245-51.



### Editor's Note:

The American Academy of Ophthalmology (AAO 2020 Virtual) took place from November 13 to 15, 2020. Reporting for this story took place during the meeting.



# 2021: The Year of Scleral Lens?

It's easier than ever before to fit contacts for irregular corneas

By Elisa DeMartino



Five hundred years ago, Leonardo Da Vinci theorized in the Codex of the Eye that vision could be altered by submerging the head into a bowl of water. More than a century later, René Descartes suggested filling a glass tube with water and placing it directly against the cornea. Obviously, these ideas were not practical for a number of ergonomic reasons.

Since then, we've jumped from scleral glass lenses (ouch!), to wax adhesive contacts (possibly, more ouch), and options that deprive eyes of oxygen (which is straight up dangerous). Luckily, the contact lenses of today offer a lot more comfort and variety — from the malleable daily lenses to Ortho-K, and even decorative planos. Yet we still struggle to fashion products that work for patients with atypical eyes.

## Not your average cornea

Regular corneal contact lenses naturally do not fit patients with corneal

distortion, severe dry eyes, corneal transplants, severe keratoconus, pellucid marginal degeneration (PMD), or those who are post-LASIK. Nor do they provide good correction for patients with any kind of high or irregular astigmatism. This is when we circle back to scleral lenses — a non-glass, much more comfortable version, of course.

Scleral contacts vault over the cornea to rest on the scleral area, stabilizing the lens position. However, when scleral lenses are mismeasured, they tend to decenter, causing discomfort and poor visual acuity to the patient. Moreover, the lens may rub against the corneoscleral junction, an area occupied by stem cells that we certainly don't want to be messing with. Unfortunately, due to the difficulty of measuring this area, many patients find themselves repeatedly in and out of the doctor's office to try on poor-fitting lenses.

This is costly and uncomfortable — not only for the patient, but also

for the provider. These patients can take up a lot of precious time and resources, and as a result, some optometrists ultimately decide not to treat these patients. A portion of visually challenged people are then left without solutions, and a niche market opportunity is squandered.

## The right device for the right measurements

However, in Singapore, optometrist Dr. Stan Isaacs has embraced this niche market. He has more than 30 years of experience with contact lenses, specializing in orthokeratology or Ortho-K, which uses custom-designed contact lenses to temporarily reshape the cornea and improve vision. Dr. Isaacs is not only the first practitioner in Singapore to offer Ortho-K, but also the first to implement the Pentacam® (OCULUS Optikgeräte GmbH; Wetzlar, Germany), a device that simplifies the specialty lens fitting process with precise corneal and scleral measurements.





According to Dr. Isaacs, he made the decision to use OCULUS devices 10 years ago based on their ability to measure the ocular anterior segment. Although new devices have come out since then, he continues to implement the Pentacam® in his practice for its other unique qualities. “The Pentacam® is the only product that actually measures corneal tissue and doesn't reflect off the tear film,” Dr. Isaacs explained, adding that this is thanks to the Scheimpflug camera system.

Already a long-time user of the OCULUS Pentacam® HR, Dr. Isaacs added the Pentacam® Corneal Scleral Profile (CSP) report software seven months ago. The CSP Report also measures a diameter of up to 18 mm, a parameter needed for scleral lens fitting.

Before introducing this instrument, they had to rely on manufacturing lenses based on eye moldings, much like a dentist takes moldings of teeth to make retainers. Because that's a much more complicated process, the ability to obtain measurements from the CSP Report has been a game-changer for Dr. Isaacs.

“As far as large fitting contact lenses are concerned, it makes our job a lot easier,” said Dr. Isaacs. “We can still do trial-and-error fittings and help these individual patients, but it costs practitioners more because you need

more refits and things like that. But using the Pentacam®, you probably need — for the really challenging corneas — maybe one or two refits.” He has also sent his Pentacam® HR to Germany to be upgraded with CSP software; and while his new Pentacam® is fitted with the CSP Report, his older Pentacam® HR will be upgraded by OCULUS with the latest capabilities, like an iris camera so that he will be able to run the CSP software.

He shared that he looks forward to how the combination of a high resolution camera will augment the device's sclera imaging performance further.

### But wait, there's more

These aren't the only Pentacam® features that make fitting specialty lenses more efficient for Dr. Isaacs. The Pentacam® with CSP is the first of its kind to offer direct compatibility with WAVE Contact® Lens System software for designing and manufacturing contact lenses. The programs are linked so that users can move images/scans from the Pentacam® into WAVE, make lens adjustments, and place an order directly.

“It's a unique product that no one else can compete with at present,” concluded Dr. Isaacs. “And it's a very unique situation where there's a good synergy from what's being produced

and what the machine is actually measuring.”

With many practices worried about COVID-19 and experiencing economic hardship, it's not surprising that optometrists may be reluctant to introduce a brand new device into their practice. Yet the majority of difficult cornea patients' problems can be solved with specialty lenses.

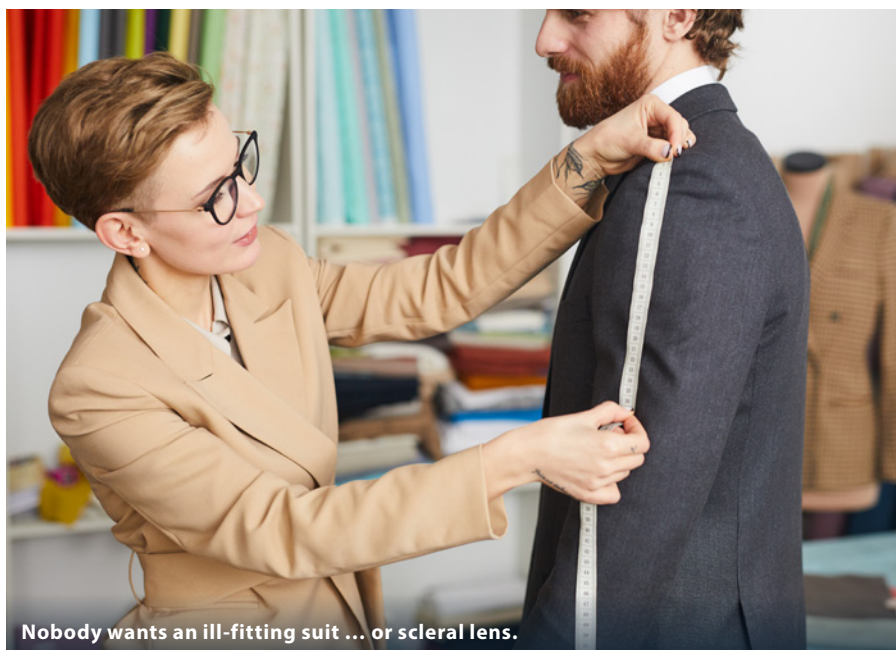
Dr. Isaacs is optimistic that once daily life goes back to normal, word will spread about the Pentacam® with CSP software and its value in eye care. “Once the international meetings open up,” he shared, “you're going to find a lot of people talking about this new generation of contact lens fittings, large lens fittings, distorted corneas being helped, and patients that really couldn't be helped before that are now being helped much more easily.” 🌐

## Contributing Doctor



**Dr. Stan Isaacs** graduated with a Bachelor of Optometry Degree with Honors from the University of New South Wales in 1975, and was awarded the Martin Wells Prize for Diseases of the Eye in the same year. In 1976 he was awarded a Master of Optometry Degree. During the Masters Course he received the Hydron Prize for Advanced Contact Lens Theory and Practice. During his master's program, he was a clinical supervisor at the contact lens clinic in the School of Optometry, University of New South Wales. Stan Isaacs started private practice in 1977, specializing in pediatric optometry and contact lenses. He was responsible for forming the Singapore Optometric Association in 1980, and was the pro-term president. In 1990 he was elected as president of The Singapore Contact Lens Society, a position he still holds to date. He has presented numerous research papers at international and local ophthalmology and optometry conferences. These presentations are usually associated with his current research on either myopia or contact lenses. He is also the Clinical Director of I & Vision Pte Ltd. which predominantly does research for international contact lens and pharmaceutical companies to determine how their products perform on Asian (Chinese descent) and Caucasian eyes.

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Nobody wants an ill-fitting suit ... or scleral lens.



# Spotlight on India

## Exploring optometry in one of the world’s most populous countries

by Jillian Webster

India has taken a hard stance in its fight against eye disease. However, access to treatment and testing opportunities vary widely across the country; further, eye care professionals (ECPs) can find difficulty in standardizing, funding and educating the population on the public health risks of eye disease. Causes of preventable blindness in India have financial, psycho-social and regional limitations.

### Eye care access across the country varies

Access to optometric treatment varies greatly across the vast nation of India, which has both bustling urban centers and small rural villages. There is significant situational and economic diversity as well — this lends itself to broad differences in the prevalence and treatment of myopia, hyperopia and astigmatism.

Dr. Shaveta Bhayana from the department

of ophthalmology at the Government Medical College Hospital in Chandigarh, India, said: “The difference between cities and villages is significant. The awareness level of village populations and the infrastructure provided at the sub-district level is comparatively low.” These differences are large problems facing ECPs in modern India.

### Knowledge of optometry in the general population

There may also be a lack of understanding of the nature of optometry in the general population. According to a 2020 study, many optometry students did not understand the true scope of optometry until they entered their programs:

“Students recalled that they had limited information about optometry when they enrolled in the course.” Some students believed they would be only dispensing eyeglasses, while others thought that they would be something like an ophthalmological assistant. Only those students who had first-hand experience with optometry knew what to expect from the program, noted the authors.<sup>1</sup>

These opinions are indicative of a larger issue. If optometry students are unsure about the parameters of the practice, then a large portion of the population is most likely also unaware of the nature of optometric vision testing and treatment.

Dr. Bhayana said: “In my opinion, in the population I work with, I have seen people ignore their eye problems a lot. Presenting to the OPD with mature cataract and late stage glaucoma is very frequently seen.” Ignoring eye problems of varying severity is one social-psychological reason for the prevalence of eye disease in India.

### Psycho-social impacts on spectacle compliance

There are many reasons why people fail to comply with suggested treatment. A study published by the *Indian Journal of Optometry* in 2018 claimed that the main barriers to treatment compliance are psychosocial, financial and social.<sup>2</sup>

The study noted that in some situations, the spectacles themselves can be a barrier to proper treatment. Because there are not enough resources in some areas, “lack of frame measurements and consequential discomfort was a major reason attributed by ECPs for poor spectacle compliance.” The study authors also shared that many patients lacked a safe place to store their spectacles, or would be severely punished by parents if “they lost or misplaced their spectacles and hence, tended not to use them.” Therefore expense and necessity of spectacle wearing can be lost to childhood irresponsibility and/ or fear of punishment.







Finances are also limiting. According to the authors, “service providers added that recurring costs of replacing broken or damaged spectacles was burdensome to many parents on account of their poor socioeconomic status.”

Dr. Bhayana agreed: “Access to a health care center along with financial constraints makes them unable to visit the hospital.” In this way, household obligations and financial restrictions prevent many people from seeking optometric aid, let alone comply with treatment recommended by ECPs.

The reluctance to comply with treatment also has social roots. It’s not surprising that school children are more concerned about fitting in with their peers than their eye health. The study continued that “social workers highlighted feelings of loneliness and inferiority experienced by children who felt embarrassed to wear spectacles in front of others.” This is because children often worry about acceptance by their peers. There are also concerns of parents regarding marriage prospects for young girls who wear spectacles. Boys, in turn, were worried about not being allowed to play on account of wearing spectacles. And there is additional social stigma against those who wear glasses, that is perpetuated by the media. This aversion may impact the progression of myopia and prevalence of treatable blindness. It is important that ECPs and lens manufacturers work hard to educate and dispel negative stigmas around wearing spectacles.

## Plans for the future of eye care

However, the future looks bright for limiting preventative blindness. The North Indian Myopia Study (NIMS)<sup>3</sup> conducted a series of vision tests at 20 different schools in Delhi. Their goal was to properly identify the prevalence of refractive issues, compare them to other populations, and make recommendations for the future of vision testing.

According to NIMS: “In India, the School Vision Screening Programme, part of the National Programme for Control of Blindness, is an important



strategy for controlling visual impairment due to refractive error.” The authors of the study stressed the importance of early and regular vision screenings in the future to slow instances of high myopia in India. Though this study is focused in the urban area of Delhi, frequent vision testing as prevention is also necessary in rural areas.

Dr. Bhayana also agreed. She said: “Mandatory school screening camps and access to the elderly population should be increased.” There are ways to improve access to eye care to underserved populations and it’s necessary for ECPs all over India to focus attention on increasing testing and general access to treatment to improve the eye health of the entire population.

India’s ECP community has made it clear that eye disease is a national health risk. Social, financial and limits of access to eye care centers are all major factors that contribute to treatable blindness. However, there is an active movement in India to increase access and knowledge of eye disease and treatment. It is evident that the

increases in testing and access to treatment are continually rising and the future of optometry in India will only improve past existing advances. 🍷

## REFERENCES:

1. Venugopal D, Lal B, Shirodker S, Kanojiya R, Kaushal R. Optometry students’ perspective on optometry in suburban Western India: A qualitative study. *J Optom.* 2020;S1888-4296(20)30009-1.
2. Narayanan A, Kumar S, Ramani KK. Spectacle compliance among adolescents in Southern India: Perspectives of service providers. *Indian J Ophthalmol.* 2018;66(7):945-949.
3. Saxena R, Vashist P, Tandon R, et al. Incidence and progression of myopia and associated factors in urban school children in Delhi: The North India Myopia Study (NIM Study). *PLoS one.* 2015;10(2):e0117349.

## Contributing Doctor

**Dr. Shaveta Bhayana** is a visual acuity specialist at the Government Medical College Hospital department of ophthalmology in Chandigarh, India.

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# With Three Generations, Optometry Runs in the Rodgin Family

by Chow Ee-Tan



Susan Rodgin over a Zoom interview.

“Unlike [my brother] Henry, who knew what he wanted to do since college, when I was young, I didn’t want to be an eye doctor. I thought it was boring looking into people’s eyes all day long,” laughed Dr. Susan Rodgin, adding that she later changed her mind.

## Third generation rising

After graduating with a degree in sociology and religion, Dr. Susan Rodgin moved to Boston and worked in the dispensary at the Boston Eye Clinic. “I worked during the day and at night I went back to school,” she said.

Dr. Susan Rodgin then obtained her Doctor in Optometry (O.D.) from the New England College of Optometry in Boston, and completed her residency at the Veterans Administration (V.A.)

Medical Center in West Roxbury, focusing on primary eye care for geriatric patients and those with physical and mental illness. She also served at Medfield State Hospital and worked part-time as a consultant optometrist.

These days, she practices optometry in a multi-disciplinary setting; in addition to her clinical work, she also serves as a clinical instructor for residents and optometry students.

Dr. Susan Rodgin also holds a Doctorate of Acupuncture from the Pacific College of Oriental Medicine in 2019. “I’m interested in the holistic approach to health and medicine and I wanted to learn Eastern medicine. I think it is an advantage to be able to combine both Eastern and Western medicine in your practice,” she said.

Today, she is a renowned acupuncturist at AcuHealing Center, which shares the same premise as her optometry practice. She splits her time 60/40 between her optometry and acupuncture practices.

“My dad was a good sport and let me practice acupuncture on him,” recalled Dr. Susan Rodgin.

When Henry Rodgin took up optometry in the early 20th century, little did he know that he would become the first of three generations of optometrists in the Rodgin family.

His son, Dr. Jay I. Rodgin also had a long and illustrious career as an optometrist; in turn, he left this legacy to his two children, Drs. Susan Gail Rodgin and Henry Rodgin who followed

the familial footsteps into optometry. Now, Dr. Henry Rodgin, 62, has his own practice, Optivision in Sunnyvale, California; while Dr. Susan Rodgin, 64, practices at the Boston Veterans Administration Medical Center in Massachusetts, USA.

“Our father Jay was a wonderful practitioner and such a role model. All along, I saw how fulfilling being an optometrist was for him,” said Dr.





Meanwhile, Dr. Henry Rodgin has received many prestigious accolades in his 36 years of private practice in California. He was the recipient of “America’s Top Optometrists” award from 2006 to 2014, as well as “The Best Of Sunnyvale Award” from the United States Commerce Association.

A graduate of the New York College of Optometry, he completed post-graduate work in therapeutics and in the treatment and management of eye disease at U.C. Berkeley. Today, Dr. Henry Rodgin practices functional optometry, a specialized practice that studies vision as it relates to the visual demands and functions of everyday tasks, which he says is very rewarding in terms of patient satisfaction.

With his business strategically located between Apple and Google in Silicon Valley, it makes sense that his current focus is on eye strain from computers and associated pathologies.

“Because of the pandemic, people are working from home with long hours online or in Zoom meetings; this has caused an increase of computer eye strain and other diseases,” he said.

Both Drs. Susan and Henry Rodgin believe that the profession of eye care is changing rapidly. The industry is much more commercialized, but also more challenging.

“As optometrists, we offer complete eye care. But now, it’s easier to get glasses or contact lenses online,” said Dr. Susan Rodgin. “The profession itself is heading into a digital world. But with advanced technology, there are also more resources available to better treat diseases and prescribe glasses and contact lenses.”

Although their careers do not cross paths, the two siblings are very close. “When dad was still around, the three of us would often consult and share with one another. He has always been very supportive of what we do,” said Dr. Henry Rodgin.

Do they think their father would be proud of them? “He has already told us that he was,” said Dr. Susan Rodgin with a smile.



## A father’s generosity and life remembered

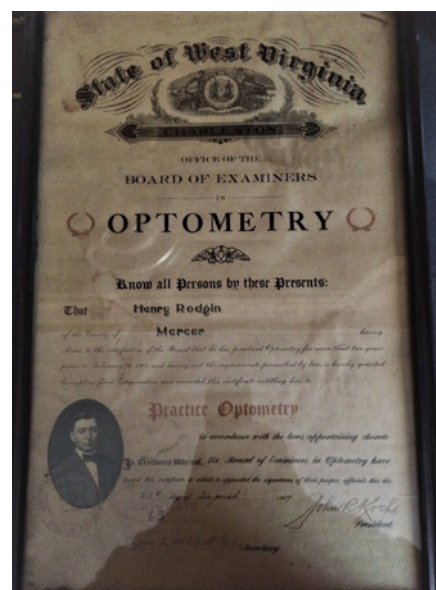
The siblings have many precious memories growing up in their family home in Bluefield, West Virginia, where their father built a renown and estimable reputation for himself.

The youngest graduate to pass the New York State Optometry Boards, Dr. Jay Rodgin earned both his undergraduate and doctoral degrees from Columbia University School of Optometry. After completing his studies, and serving four years in the U.S. Army Air Corps, he returned to Bluefield to open his optometry practice.

He was a member of the International Association of Ophthalmologists and Optometrists, and served several terms as president of the WV Optometric Association and the WV Board of Optometry. He was also an emeritus fellow of the American Academy of Optometry, and was awarded the Lions Club International Sight Conservation Award twice.

He also authored a book titled *Pathology and Pharmacology of the Eye* in 1983, and wrote two books reflecting on his life in his 80s and 90s.

Dr. Jay Rodgin was influenced by his father, Dr. Henry Rodgin. Drs. Susan



**CLOCKWISE: Dr. Jay Rodgin, Henry Rodgin and wife Anna Rodgin in 1930, Dr. Henry Rodgin’s optometry license from 1909**

and Henry Rodgin did not meet their grandfather, but they have heard much about him from their father.

The late Dr. Henry Rodgin was only 18-years-old when he opened a jewelry store — called The Henry Rodgin Company — in 1902. Telling a story about his father in one of his books, Dr. Jay Rodgin wrote: “One day, a man came in [to the jewelry store] with an old American Optical trial lens set and trial frame. The man wanted an



engagement ring and said he would leave the lenses and frame as security until he could return with the money to pay for the ring. The man never returned.

“My father decided to use the lenses. He then took a correspondence course in optometry and became licensed to practice in 1909. During the Great Depression, optometry became Henry’s main source of income.

“During the pre-World War I period, the role of optometry practice was very different. It was all to do with prescribing and fitting glasses,” said Dr. Susan Rodgin. “By the time our father went to Columbia, the discipline included eye health. And today, optometry is an even wider field and is very much health-oriented.”

Dr. Susan Rodgin also remembers her father as a very generous person.

“When people came into his shop and could not afford glasses, he prescribed glasses for them and asked them to pay him whatever and whenever they could,” she said.

Dr. Jay Rodgin’s interpersonal skills were a cherished part of his life — he loved talking with people and nourishing relationships. He was also very dedicated to whatever he took up: He was very committed to his Synagogue and was highly regarded in service associations like the Rotary Club and Lions Club.

“He had a way with people and people just loved him. In fact, it seems everybody in town knew him,” said Dr. Susan Rodgin.

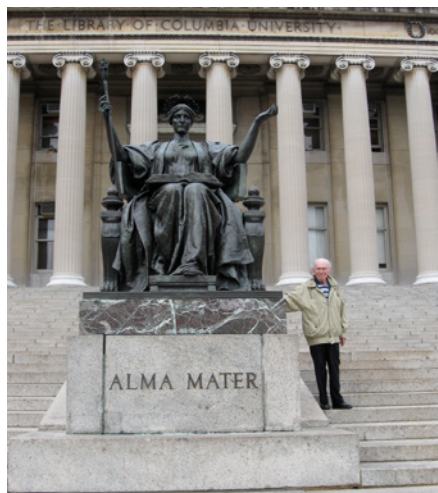
A most dedicated optometrist, Dr. Jay Rodgin didn’t retire until he was 92, which gave him more time to spend

with family and friends, reflect and write, and frequent restaurants around town.

Dr. Jay Rodgin passed in 2016 at the age of 96, surrounded by his children and grandchildren.

And today, the family’s legacy continues. Although none of Drs. Susan and Henry Rodgin’s children took up optometry, some of them are working in healthcare.

One of Dr. Susan Rodgin’s daughters is a neurologist, while another works for a company that makes robotic healthcare products. Her son is a business investor in Vietnam. Meanwhile, Dr. Henry’s 30-year-old daughter is a pediatric psychologist. 🧠



**CLOCKWISE:** Dr. Jay Rodgin at his alma mater, Dr. Susan’s son Isaac at his grandfather’s alma mater, Dr. Henry Rodgin’s graduation in 1980, Drs. Susan, Henry and Jay Rodgin

### Contributing Doctors



**Dr. Susan Rodgin** is an optometrist and acupuncturist in private practice in Wayland, Massachusetts, USA. She graduated from New England College of Optometry, Boston, and worked part-time at the V.A. Medical Center in Boston and retired from there in 2019. She obtained her Doctorate in Acupuncture from Pacific College of Oriental Medicine. She is honored to grow up under her father’s legacy, she strives to be the highly competent and compassionate type of doctor as he was.

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**Dr. Henry Rodgin** graduated from the New York College of Optometry has done post-graduate work in therapeutics and the treatment and management of eye disease at U.C. Berkeley.

Having been in private practice for 35 years, he treats eye infections, ocular inflammation and allergies, as well as LASIK co-management. Dr. Rodgin is the recipient of the prestigious America’s Top Optometrists award from 2006 to 2014, and 2018 given by the consumer’s research council of America. Dr. Rodgin was just awarded “The Best Of Sunnyvale Award” by the United States Commerce Association and is in the Sunnyvale Business Hall of Fame. He continues the legacy of his inspirational father Dr. Jay I. Rodgin.

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## The Next Generation of Smart Glasses is on its Way



to do that. With EssilorLuxottica we have an equally ambitious partner who'll lend their expertise and world-class brand catalogue to the first truly fashionable smart glasses," said Andrew Bosworth, vice president of Facebook Reality Labs.

The announcement was made by Mark Zuckerberg back in September 2020. The multiyear collaboration will combine Facebook apps and technologies, Luxottica's category leadership and iconic brands, and Essilor's advanced lens technology to help people stay better connected to their friends and family, according to a press release. Product name, specs, software capabilities, pricing and other details will be shared closer to launch this year.

**T**he brand that brings you brand name sunnies (EssilorLuxottica) and that platform that brings you cat memes (Facebook) are stepping in where Google Glass left off to take a swing at launching the next generation of smart glasses.

If you're not sure what exactly Google Glass was, you're not alone. While indeed, the idea of "smart glasses" is a novel one, many agree that Google thought that this "novelty" would sell it itself, instead of marketing the product's reality (or value). Google Glass allowed users to send messages, look at photos and go online — which can all be done via the numerous other devices most people already own. Further, the camera made people uncomfortable; some places did not allow patrons in wearing the device.

But privacy, technology and fashion issues aside — there's no doubt: This could be an interesting device.

This new collaboration plans to launch its first product in 2021 under the immensely popular Ray-Ban brand. Further, these smart glasses are said to "combine the best of both worlds — innovative technology and fashion-forward style — to create smart glasses that consumers will truly love wearing." So, it will be interesting to see how the EssilorLuxottica and Facebook team overcomes the technology and privacy issues that sank Google Glass.

"We're passionate about exploring devices that can give people better ways to connect with those closest to them. Wearables have the potential

"We are especially proud of our collaboration with Facebook, which projects an iconic brand like Ray-Ban into an increasingly digital and social future. Combining a brand that is loved and worn by millions of consumers around the globe with technology that has brought the world closer together, we can reset expectations around wearables. We are paving the way for a new generation of products destined to change the way we look at the world," commented Rocco Basilico, chief wearables officer at Luxottica. 🍪



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