

"We don't see things as they are.
We see them as we are." – Anais Nin



The Walton Lighthouse in Santa Cruz stands over 40 feet tall and weighs 350,000 pounds.

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Auroral Announcements

1. MBOS is working on getting a hopefully in-person continuing education dinner meeting set up for the fall and we are also working with Healing California to try to organize a vision screening in Santa Cruz in the fall or winter as well. Keep an eye on your email for more info on these as we finalize the details.

2. Connie Williams, RN, BSN, MS, is the health career education coordinator for Watsonville Aptos Santa Cruz Adult Education. Their school may be interested in starting an ophthalmic assistant training program. She would like to know if there is a need for ophthalmic assistants in the Monterey Bay area, and if you have any advice about starting an ophthalmic assistant training program. If anyone is interested in helping her with these questions, she can be reached at 831-600-5220 or connie williams@pvusd.net

Opalescent Optometry Occasions

8/8: OptoWest at the San Jose Marriott – 5 hours of CE featuring Dr. Pinakin Davey on glaucoma, DR, and ARMD and Dr. Pat Satjawatcharaphong on scleral lenses: https://sites.google.com/coaboard.org/coace/optowest/

Candent Community Calendar

8/7: Salinas Valley Food and Wine Festival, https://www.salinasvalleyfoodandwine.com/food-and-wine-festival/
8/6 to 9/19: Shrek the Musical by Pacific Repertory Theatre at Forest Theater in Carmel, https://www.pacrep.org/
Nightly in August: Santa Cruz Shakespeare, https://santacruzshakespeare.org/season-2021/
Every Wednesday in August: Wine Down Wednesday at Chaminade Resort featuring free showings of movies, https://www.eventbrite.com/e/cinema-chaminade-movies-on-the-mountain-tickets-137222053857
9/19: Aloha Outrigger Races, https://www.cityofsantacruz.com/Home/Components/Calendar/Event/19200/

FORWARD FOCUS: Volunteering

One of our favorite things about living in Monterey County is the abundance of fresh fruit and other produce we purchase at local farmers' markets and roadside vendors. However, many of the workers who help to harvest that food are undocumented, which means they are ineligible for full-scope Medi-Cal, and therefore ineligible for vision coverage through it. While Medi-Cal is a wonderful program, there are many who cannot participate.

Sandra Williams, Chief of Eligibility for Medi-Cal at the California Department of Health Care Services, noted there are two main groups who are not covered by Medi-Cal during my phone call with her. They are:

- 1. Patients who are over the federal poverty level.
- 2. Undocumented immigrants, who are not eligible for full-scope Medi-Cal (only emergency services, which does not include eye exams / materials), unless they are under 26 years of age or pregnant.

For these individuals, volunteer services can be a great benefit. And, due to the large number of farms generating fresh produce, Monterey County has the highest percentage of non-citizens of any California county. While approximately 5-10% of Californians are undocumented, double that number, 15-20%, of Monterey County residents are undocumented.

Thankfully, there are a number of organizations which provide volunteer services and clinics.

Stand Down events, a part of the VA Homeless Programs, has a number of events throughout the state, although not in the Monterey Bay area. See a list of events and sign up to participate at https://www.va.gov/homeless/events.asp

Life Hope Centers, which sponsors a health fair at the Soquel Conference Center, has not restarted their clinics yet, but they are one of the closest consistent volunteer opportunities in the area. For potential events, you can keep an eye on their website at https://www.lifehopecenterscentral.com/



Measuring seg height at a Life Hope clinic in Soquel.



Checking VA at a health fair in LA.







Performing refraction at a Veterans Stand Down event.

Healing California provides pop-up clinics for vision and dental services across the state in partnership with local organizations at https://healingca.org/

VSP has four mobile clinics which visit communities affected by disaster through Eyes of Hope: https://www.vspproviderhub.com/eyes-of-hope

Most of these groups provide all of the equipment needed for eye exams, and many fabricate glasses same-day on-site to provide to the patients.

There are multiple other potential sources of volunteer clinics as well, including the Opening Eyes program through the Special Olympics, health fairs sponsored by the American Diabetes Association, and health fairs in partnership with various local politicians, non-profit groups, and colleges.

In addition to clinics, there are many programs you can participate in from the comfort of your own office. These include the COA's California Vision Foundation (which is currently in need of assistance in the Salinas, Monterey, and surrounding areas), https://www.coavision.org/i4a/pages/index.cfm?pageid=3719, Essilor's Changing Life through Lenses, https://changinglifethroughlenses.org/referral/CVP, and AOA's InfantSee program, https://infantsee.org/

Q&A with Rhonda Wilson, Program Manager for VSP Eyes of Hope

Q: When will mobile eye clinics start again?
A: We are gearing up to restart the VSP Eyes of Hope mobile clinics for a few events before end of year and expect to have a full schedule in 2022.

Q: How many mobile clinics does VSP have?
A: VSP Eyes of Hope has four mobile clinics,
affectionately named SeeZar, SeeLia, Eyenstein, and
Odyssee. Each clinic is outfitted with an eye exam
room and portable equipment for volunteer doctors
to use, an eyewear dispensary stocked with Marchon
and Altair frame brands, and an optical finishing lab
stocked with Unity lenses from VSP Optics.

Q: How can doctors sign up to volunteer?
A: At https://vspglobal.com/cms/vspglobal-outreach/volunteer-clinic.html

Q: Can a non-VSP doctor volunteer?
A: VSP always looks for opportunities to connect VSP network doctors with mobile clinic events in their communities. In instances where a network doctor is not available, we welcome non-VSP network doctors. We ask all of our volunteer doctors to review and sign a Doctor Agreement, indicating they have insurance coverage and an active OD license in the state where outreach is being delivered.

Q: Why would a patient not be covered by Medicaid and therefore benefit from a mobile clinic?
A: There may be many reasons. A 2019 article from the Desert Sun outlines some of the reasons that individuals may not be enrolled in Medi-Cal, which include a lack of awareness about the program or the qualifications to enroll, fear or distrust, technology or language barriers, or needing assistance to enroll.

Q: Anything else you'd like to add about the program? A: To date, VSP Eyes of Hope initiatives have provided access to no-cost eye care and eyewear for more than 3.3 million adults and children in need.



I volunteered with VSP for World Sight Day. Patients were able to pick out their glasses after finishing their eye exams.

International Mission Trips

If you would like to help those outside of the US, there are a variety of groups serving a multitude of countries, although most of these are currently on hold due to the COVID-19 pandemic.

You can read about Dr. Curt Simmons' trip to Jamaica with AOJAH in the June 2019 Beacon.



Here are just a few of the many other organizations which sponsor optometry missions.

If you are interested in a particular region, it's quite easy to Google for opportunities.

https://vosh.org/

https://visionspring.org/

http://www.uniteforsight.org/

http://christianeye.net/

http://www.globalsight.org/

https://www.seeintl.org/

https://www.cureblindness.org/

https://eyecareproject.com/

http://www.amigoseyecare.org/

https://missionguatemala.com/missiontrips/

https://internationalmedicalrelief.org/

https://www.ramusa.org/

http://www.mmex.org/

https://cmda.org/fellowship-of-christianoptometrists/fco-mission-opportunities/

EDUCATION EMANATION: Dr. Celia Chao

For our May MBOS CE, Dr. Celia Chao, an associate ophthalmologist at Sani Eye Center, discussed dry eye, pterygium, and pingecula.

For dry eye, she mentioned that it could be the first sign of sleep apnea, and you could save a patient's life by diagnosing it. For pingecula, she noted the importance of ruling out episcleritis and scleritis.

Masquerades: ocular surface malignancies







For pterygium, surgical indications include interference with vision (encroach on the visual axis or worsening astigmatism), chronic irritation, or being a hindrance to cataract surgery (growing where wounds will be made, which can alter the lens). Most surgeons now perform a conjunctival autograft, as there is less recurrence, less pain, faster healing, and less risk of corneal melt than with older methods.

She also covered masquerades, which could include squamous neoplasia, conjunctival lymphoma or melanoma, systemic tumors, and metastatic diseases.

Sani Eye Center has a surgical center in Templeton and also non-surgical offices in King City and Salinas.

"No one lights a lamp in order to hide it behind the door: the purpose of light is to create more light, to open people's eyes, to reveal the marvels around." - Paulo Coelho

INTERNET INCANDESCENCE: Cataract Coach



Dr. Uday Devgan, a cataract surgeon in Los Angeles, has posted hundreds of videos of surgery on his website and YouTube. From routine to complex cataracts, from silicone oil removal to glaucoma valve insertions, from Descemet detachment to iris prolapse, this site has a plethora of videos involving the anterior segment. To learn more about almost any procedure or issue that can arise during surgery, https://cataractcoach.com/ is an amazing resource.

LEGISLATION LAMP: PCQ2, Medicare Expansion

President's Council Q2

At President's Council, Quarter 2 in June, we first discussed health care delivery systems. One topic was that Medicare Advantage is becoming very common, with up to 65% penetrance, and networks are narrowing. A good piece of news was that some optometrists gave more than 100 COVID-19 vaccines.

The advocacy panel stated the COA is working on three key pieces of legislation, including SB 509 for a provisional license if one cannot get a license normally during a pandemic, AB 691 for COVID-19 vaccine and testing, and AB 407 for scope of practice. They also mentioned that you cannot sell prescription drugs out of your office in California.

In Children's Vision, a focus was that many kids have not had eye exams. The HCDS team plans to meet with the governor to work on this issue, in addition to a social media campaign on importance of eye exams for children, a podcast on eyecare topics with fun episodes about eyes and vision, and training for school nurses for vision screenings.



Membership discussions pointed out that new graduate membership increased 57% since 2015, but the big question is how to recruit more mid-career optometrists. The committee is working on a few different pilot program proposals to see which might work with the COA and AOA.

AskAOA Medicare Expansion Webinar



Dr. Bob Theaker, chair of the AOA Federal Relations Committee and MBOS member, answered questions from virtual attendees.

Only July 29, there was an AskAOA webinar covering the potential Medicare expansion.

Dr. Jeff Michaels covered a brief history, including that optometry was recognized under Medicare during the Budget Reconciliation of 1986.

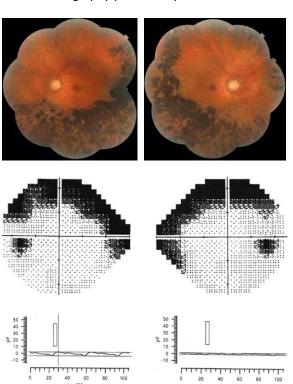
Unfortunately, there are still many Medicare gaps. For example, only 54% of Medicare Part B patients with diabetes had an eye exam in 2017. In addition, glasses are only allowed after cataract surgery, and contact lenses are only available for aphakia. Medicare patients must use DME supplier who is DME enrolled. To be a DME provider requires a \$599 enrollment fee every 3 years. If dispensing glasses to patients who are not yours, you also need a surety bond. This usually costs around \$300-\$1500 per NPI depending on your credit score and bond amount.

There are many potential bills for Medicare expansion at the moment. These include HR 1976 by Rep Jayapal, HR 4187 by Rep Shrier, and HR 4311 by Rep Doggett. **The AOA is working closely with bill writers to create language which benefits you.** The AOA is pushing for materials to be direct from Medicare (not third-party providers), to prevent online sellers, and to ensure that physicians are appropriately reimbursed.

"What you see and hear depends a good deal on where you are standing; it also depends on what sort of person you are." – C.S. Lewis

ILLUMINATING INSTANCE: Retinitis Pigmentosa

Case 1: A 60-year-old man came in for new glasses. Visual acuity was 20/20 corrected in each eye, but he had superior vision loss in each eye on confrontation fields. A dilated fundus examination revealed bony spicule pigmentation in the periphery, with inferior and nasal more central than superior and temporal. A 24-2 visual field demonstrated visual field loss in the superior quadrants, nasal greater than temporal. Electroretinography yielded very flat waveforms.



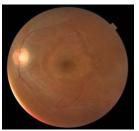
Left and right retinal photos, visual fields, and ERGs.

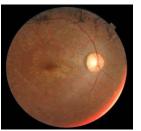
Case 2: A 25-year old man came in for new glasses. Per the patient, he had a history of a traumatic retinal detachment in his right eye, resulting in a visual acuity of light perception. His left eye was 20/20 corrected but with severely reduced fields on confrontation. Dilated fundus examination revealed extensive bony spicule pigmentation in the periphery of the right eye, but almost none in the left. Both eyes had waxy pallor of the optic discs, attenuated retinal vessels, and parafoveal atrophy. The right eye also had scarring through the retina as a result of the RD.



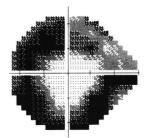


Peripheral photos: vessel attenuation left; bone spicules right.

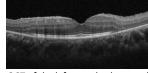


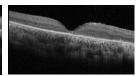


Left (RP only) and right (RP and RD) retinal photos.

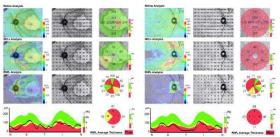


Left visual field with a 360-degree peripheral vision loss. (No visual field was obtained for the right eye due to the RD.)





OCT of the left macula shows only parafoveal photoreceptor loss, while the right macula shows a more generalized scarring as a result of the retinal detachment.



Left OCT demonstrates a central-sparing loss; right is more total.

Discussion

These cases demonstrate the variable presentation and visual impact of retinitis pigmentosa, with the older patient having a much more limited peripheral vision loss. In fact, while the first patient's results were nearly identical mirror-images, the second patient even had a very dissimilar appearance between the two eyes. How much of that is due to the retinal detachment in the right eye is difficult to say, but the lack of bony spicule pigmentation in the left eye compared to the extensive pigmentation in the right is interesting, in addition to the left eye's optic disc having a greater waxy pallor.

This is at least partly due to the fact that retinitis pigmentosa is not a single disease but a group of rare genetic disorders. Mutations of more than 50 genes are involved, with varying inheritance patterns and inconsistency between the genotype and the phenotypic manifestation. Pathophysiology consists primarily of rhodopsin protein misfolding.

Symptoms are primarily reduced peripheral vision and decreased night vision, although color vision and central visual acuity can also be impaired.

Clinical signs include peripheral bony spicule pigmentation, a waxy optic nerve, and attenuation of blood vessels. Visual fields will show constricted peripheral vision, ERG will show flattened a-waves and b-waves, dark adaptation will be lengthened, OCT can reveal retinal layer thinning, and fluorescein angiography can have hyperfluorescence and hypofluorescence. Genetic testing is available for some but not all genes which can lead to RP.

There is currently no treatment for RP. High-dose vitamin A, fish oil (omega-3), and lutein have shown possible promise in some studies, but meta-analysis of multiple studies indicate the results are uncertain. Low vision training and devices can be beneficial.

Gene therapy by Spark Therapeutics' Luxturna, a one-time subretinal injection for the RPE65 mutation which can cause Leber's congenital amaurosis and retinitis pigmentosa, demonstrated increased ability to perform activities of daily living at one year, including a 100-fold improvement in light sensitivity, an 8-letter improvement in VA, and a nearly doubled VF in sum total degrees. As RP is estimated to affect 50,000 to 100,000 individuals in the US and less than 2,000 of those are caused by that gene mutation, this is a very limited treatment option, but hopefully future gene therapy will bring additional remedies.

LUMINOUS LOCATION: Lynn's Arcade

This has nothing to do with optometry, but I had this space here, so I thought I'd highlight a local business we enjoyed visiting recently.

Lynn's Arcade, located in Seaside, has a variety of pinball machines. With an entry fee of \$15 per adult or \$10 per minor, you can play all day long, with all of the games on free play. They have a variety of beers which can be purchased, too. You can also rent the location for birthday parties and events or rent the machines individually. We went on a late Saturday night and it wasn't very crowded, so there were always multiple open games you could hop on without waiting.

Current hours are M-F 5pm-12am, Sat 12pm-12am, Sun 10am-10pm.

For more info, visit http://lynnsarcade.com/



Enjoying the games.



Enjoying the drinks (we love sour beers, and they had quite a nice variety).

REFLECTIVE RESEARCH: 2020 Analysis

2020 was a terrible year. Approximately 375,000 people died in the US alone, and an estimated 200,000 small businesses closed due to COVID-19. As optometrists, we were very lucky in many ways.

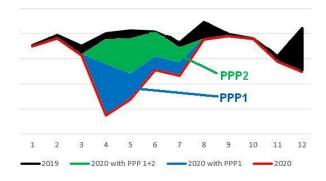
Paycheck Protection Program

We were able to continue to our work, albeit in a limited manner for a few months, and we able to offset income losses through two rounds of Paycheck Protection Program loans, along with unemployment and other benefits for ourselves and our employees.

The following chart shows my personal income data. The top of the black line was my 2019 income; the red line at the bottom was my 2020 income. As you can see, April, May, June, and July were the hardest hit months, with a reduced income of 82%, 67%, 38%, and 37% respectively (December was also a bad month, with a 41% income reduction, although I might have simply worked a lot that month in 2019).

The blue fill represents income gained back through the first PPP loan, and the green fill represents income gained back through the second PPP loan. The black fill is income which was never recovered.

Income lost due to COVID

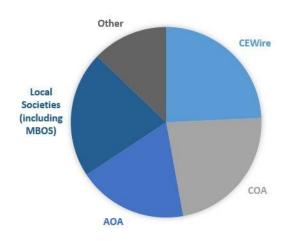


I am very thankful for the PPP program. With it, I only had an approximately 10% income loss from 2019 to 2020; without it, I would have lost nearly 25%. I'm also very grateful to the AOA and the COA for their timely information and webinars on this program, which provided excellent advice on how to navigate the application and forgiveness processes.

Continuing Education

While the pandemic made in-person continuing education impossible, the COA and the California State Board of Optometry worked quickly to allow live virtual CE to count as in-person CE. I ended up obtaining a total of 70 credit hours in 2020 through a variety of sources as show in the chart below.

2020 CONTINUING EDUCATION



Personal Protective Equipment

COA hosted a list of where you could obtain PPE. AOAExcel had information on PPE availability and access as well as sourcing competitively-priced PPE for you. In addition, multiple optometric device manufacturers provided PPE to optometrists.

However, I actually acquired my PPE on my own. During the early months of the pandemic, Amazon sold PPE solely to health care professionals by verifying your NPI number through a Business account. I bought a number of masks which fit me poorly but which I was able to give away to other providers until finding some which fit comfortably.









VESPERTINE VENERATION: Drs. Theaker and Anderson

Dr. Bob Theaker and Dr. Betsy Anderson graduated from UC Berkeley School of Optometry in 1991 and 1992, after having met as physiology lab partners in undergraduate work at UC Berkeley. They moved to Monterey and married in 1995.

Dr. Bob the clinician joined the practice of Dr. Richard Koleszar in Hollister in 1991, and has worked there constantly since then, along with assisting at the practices of Drs. Estrada and Fewtrell, Dr. Suzuki, and the Monterey VA Clinic at Fort Ord.

Dr. Bob the politician became active in the Monterey Bay Optometric Society, serving as Education Director from 1993 to 1996, Keyperson Coordinator from 1996 to 2001, and President from 1998 to 1999. He went on to volunteer at the California Optometric Association in 1998 as a member of the Nominating Committee. Since then, he has been on various committees at the COA for 23 years straight, including serving as President in 2007 to 2008. He was Chair of the COA Legislative Committee in 2004 to 2005, and has been a member on that committee ever since. He is also currently Chair of the American Optometric Association's Federal Relations Committee.

Dr. Theaker has been involved with the Monterey Peninsula Sunrise Rotary Club since 1992, including serving as president, and has been on several Rotary and Flying Doctor trips to Mexico throughout the years to provide vision and ocular health care to patients in areas which lack eye care services.

Dr. Anderson spent her early years in Monterey working for Drs. Rick and Ellie Hattori, Dr. Tom Suzuki in Watsonville, and Dr. Jeffrey Braff in Salinas. She raised their two children and volunteered at many local schools and charitable organizations. She attended many Monterey Bay Optometric Society events and meetings and traveled to optometric meetings all around the country.

Today she still works at the Hollister Vision Center and with Dr. Covie Gonzalez in Monterey. Her passions include stamping, crafts, traveling, hiking, and agility training with her dog Ringo.

Both doctors are extremely happy that the wonderful profession of optometry has helped them live and work in the Monterey area these many years, and are grateful for the friendships amongst many of their fellow MBOS members.



"Do not be dismayed by the brokenness of the world. All things break. And all things can be mended. Not with time, as they say, but with intention. So go. Love intentionally, extravagantly, unconditionally. The broken world waits in darkness for the light that is you."

- L.R. Knost

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