

The Latest Eyes on Light!

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I am excited to report on the College of Syntonic Optometry's (CSO) 92nd annual conference at the stunning Loews Ventana Canyon Resort in Tucson, AZ. Once again, the conference was inspiring and the venue exceptional! The speakers were on top of their game and challenged future speakers to be as engaging and current. The attendees were engaged and earnest in their desire to learn and connect. Many are creative and respected practitioners in the field of syntonics and as always, it was great to see most everyone.

Sadly, this year we felt the loss of our long standing board member and treasurer, John Pulaski, OD, FCSO. We were all deeply saddened by his sudden passing and his presence was missed. After we watched a beautiful photo tribute video of John through the years, the conference began with the 101 and 201 courses. Hans Lessmann, OD, FCOVD, FCSO began with a **History of Light Therapy** with some new tidbits of information followed by an updated **Theory and Practice of Syntonic Phototherapy** by Larry Wallace, OD, PhD, FCSO. Brenda Montecalvo, OD, FCOVD, FCSO shared **The Alpha Omega Pupil** via a video of John Pulaski's previous course and Rob Fox, OD, FCSO gave his **Introduction to Syntonic Symptoms**. The second day of 101 included **Syntonic Cases** by Rob Fox and Phil Bugaiski, OD, FOVDR, FCSO followed by **Functional Fields** by Mary Van Hoy, OD, FOVDR, FCSO. Larry Wallace, OD, FCSO led off the 201 courses with **Biotyping and Advanced Filters**, a deeper dive into biotyping and morphology and the use of filters based on endocrine, adrenergic and hormonal considerations. Cathy Stern, OD, FCOVD, FNORA, FCSO discussed the mechanisms of action, latest research and current applications on photobiomodulation in her talk **Modulated Light as Therapy for Ocular Disease-Harmful or Helpful**. Simon Grbevski, OD, B Optom, FACBO, FOVDR, discussed the pros and cons to the different types of visual fields, what they look at and how to interpret the differences in color, eyes and blind spot mapping in his **Advanced Interpretation of Visual Fields**. His talk was followed by Jamie Ho, OD, FAAO, FOVDR's presentation on **Autonomic Nervous System and Heart Rate Variability Considerations for Evaluating Syntonic Filters**. She delved into what heart rate variability (HRV) is, how it is measured and how it can be used in clinical practice to gain coherence and improve symptoms. Her presentation was a good precursor to Alia Santoyo, OD, FCSO's presentation on **Helping Patients Find Coherence Through Breathwork and Syntonics**. Dr. Santoyo shared practical ways to help our patients lead calmer, healthier lives. The 201 ended with **Hot Topics and Advanced Cases**, first with a talk I presented on **Postural Orthostatic Tachycardia Syndrome (POTS)** discussing the definition, comorbidities and treatment options including syntonics, followed by Brenda Montecalvo, OD, FOVDR, FAAO, FCSO who spoke about **Persistent Postural Perceptual Dizziness (PPPD)**. Dr. Montecalvo shared cases treated with syntonics.

The main conference began with Laura Chonko, OD's presentation on **Photobiomodulation: Light as Medicine-Past, Present and Future**. She shared a comprehensive review of the history of photobiomodulation with emphasis on the work of John Ott as well as the mechanisms and various applications of photobiomodulation. She touched on former CSO speaker Gerald Pollack's work on water and discussed the varied research in the

field of light and its effects on the body and use for the treatment of various diseases. Dr. Conko concluded with a discussion about sunlight and practical recommendations for our patients.

We were honored to see our last year's keynote speaker and author, Josh Rosenthal, MD, return to speak about **Practical MitoCircadian Medicine**. He spoke about mitochondrial dynamics and repair, circadian rhythms, the history of lighting and the harm of artificial light. He discussed the importance of melatonin for sleep, mental, heart and digestive health, healthy vision and prevention of cognitive diseases and cancer. Dr. Rosenthal discussed bioenergetics and shared about Roeland Van Wijk's important book Light in Shaping Life-Biophotons in Biology and Medicine, which outlined research in the field of bioenergetics and its importance for understanding cell growth, development and disease prevention. He discussed how the circadian system regulates autophagy and that mitochondrial biogenesis is modulated by light, cold, food and sleep. He talked about the importance of natural sunlight and protecting ourselves from electromagnetic frequencies (EMF) including dirty electricity. He again shared that Vivarays was the best option for blue light blocking and that it was crucial for us to educate our patients about the need for daily sunlight exposure.

Next, our own Simon Grbevski spoke about **How the Endocrine System Neurotransmitters and Brain Waves affect Visual Function**. He discussed the effects of stress and discussed the relationship between neurotransmitters and the different types of brain waves and their associated frequencies and brain areas. He, too, spoke about HRV and reviewed the complexity of the endocrine system and how hormones are affected by a variety of factors such as stress, nutritional deficiencies, trauma and lifestyle. Dr. Grbevski gave a comparison of the endocrine and nervous systems and talked about the effects of hormones on the visual system as well as clinical considerations for hormone replacement.

Peter Guhl, OD, FAAO, FOVDR, FVAO, CCII then spoke about **Quantum Physics and the Human Body-We Are but Dust**, not butt dust. If you know Peter, then you recognize that this was a fast moving journey through the world of quantum physics, energy medicine, oculomics (the use of the eye as a biomarker) and biophotonics. He gave a demonstration of human quantum energy and challenged us to think out of the box in our care of our patients.

The first day finished with an exciting presentation by the energetic Amy Thomas, OD, FOVDR on **Syntonics in the Vision Therapy Room**. She shared many examples of games and activities that can be done using syntonics filters in the therapy room including the use of poi balls. Her presentation was clear and engaging as she had many videos demonstrating techniques that work and are easy to implement.

The final day of our conference began with a talk by one of our favorite repeat speakers, Anadi Martel, MSc., on **Recent Advances in Multisensory Neurostimulation**. He reviewed the pathways for vision and sound processing, talked about gamma brain wave studies and reviewed various forms of multimodal sensory stimulation including brainwave entrainment, sensory learning tables, transcranial electromagnetic neurostimulation and his Sensora. Chula Lerdvoratavee, OD, FOVDR, FCSO followed with a **Multisensory Case** using multiple different forms of photobiomodulation, neurostimulation and syntonics.

Steve Curtis, OD, FOVDR, FCSO continued the conversation on multisensory effects in his talk, **Understanding Multisensory Processing and its Role in Vision Therapy Outcomes**. He defined multisensory processing and gave great examples of vision therapy techniques with many informative videos of multisensory activities and ways to modify them.

Next, Brenda Montecalvo, OD, FOVDR, FAAO, FCSO talked about **ipRGC Effects on Human Health**. She shared about the latest research on ipRGC cells and the nonvisual pathways. She talked about the effects of blue light and the clinical uses of photobiomodulation for myopia, emotional instability, cognitive and other diseases.

I was honored to speak next about iris analysis and much more in my course **Behold the Eyes: How to use Iris Analysis to Inform Treatment**. I shared about Ellen Tart-Jensen's work on iridology and Denny Johnson's inspired Rayid insights on iris, birth order, family tree and cycles and seasons of time. I gave practical applications on how to use those two techniques to develop a treatment plan that included syntonics light therapy. Most importantly, I shared how important it was to really see our patients and connect with them as unique individuals.

The day ended with Anadi's demonstration of his Sensora light therapy followed by our long standing dean of CSO, Ray Gottlieb, OD, PhD, FOVDR, FCSO along with Cathy Stern. They rounded out the meeting in their talk **Advances in Photo-Medicine**. Ray shared wonderful stories from the past and the latest breakthroughs in the fields of light and photobiomodulation. As always, how he weaves his stories in with the most current research is inspirational and brings hope for the future of syntonics optometry.

The conference culminated with the **Awards Banquet Dinner**, a message from our president, Brenda Montecalvo, OD, FCOVD, FCSO, and the **Presentation of Awards**. We honored many who successfully completed the 101 and 201 courses and greatly look forward to next year on the east coast, most likely in Virginia Beach, VA. We hope to see many of you there as well as many new colleagues! We also hope to welcome a few new fellows so please check out the website for information on the road to fellowship and great resources on syntonics!