ACUVUE® VITA™ Brand Contact Lenses are indicated for vision correction as a daily wear lens with one-month recommended replacement. As with any contact lens, eye problems, including corneal ulcers, can develop. Some wearers may experience mild irritation, itching or discomfort. Lenses should not be prescribed if patients have any eye infection, or experience eye discomfort, excessive tearing, vision changes, redness or other eye problems. Consult the package insert for complete information. Complete information is also available by visiting acuvueprofessional.com or by calling Johnson & Johnson Vision Care, Inc. at 1-800-843-2020.

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Sam desires the replacement cycle and affordability of monthly wear but wants to avoid declining comfort over the month, which may be caused by a change in lens hydration.

*Helps protect against transmission of harmful UV radiation to the cornea and into the eye.

WARNING: UV-absorbing contact lenses are NOT substitutes for protective UV-absorbing eyewear such as UV-absorbing goggles or sunglasses because they do not completely cover the eye and surrounding area. You should continue to use UV-absorbing eyewear as directed. NOTE: Long-term exposure to UV radiation is one of the risk factors associated with cataracts. Exposure is based on a number of factors such as environmental conditions (latitude, geography, cloud cover) and personal factors (extent and nature of outdoor activities). UV-blocking contact lenses help provide protection against harmful UV radiation. However, clinical studies have not been done to demonstrate that wearing UV-blocking contact lenses reduces the risk of developing cataracts or other eye disorders. Consult your eye care practitioner for more information.

Because I know Sam wants a full month’s use from his lenses, I prescribe NEW ACUVUE® VITA™.

EYE-INSPIRED™ Design | Reliable, superior comfort—all month long

NEW HydraMax™ Technology
is a non-coated silicone hydrogel formulation balanced to help MAXIMIZE and MAINTAIN hydration.

HYDRATION is MAXIMIZED
with the maximum amount of hydrating agent integrated throughout this lens.

HYDRATION is MAINTAINED
with optimal density and distribution of beneficial lipids throughout this lens.

Patient ratings for ACUVUE® VITA™ were superior at weeks 1, 2, 3, and 4 for “Overall Comfort” compared to Air Optix® Aqua, Biofinity® and Ultra™.

ACUVUE® VITA™ Brand Contact Lenses are indicated for vision correction as a daily wear lens with one-month recommended replacement. As with any contact lens, eye problems, including corneal ulcers, can develop. Some wearers may experience mild irritation, itching or discomfort. Lenses should not be prescribed if patients have any eye infection, or experience eye discomfort, excessive tearing, vision changes, redness or other eye problems. Consult the package insert for complete information. Complete information is also available by visiting acuvueprofessional.com or by calling Johnson & Johnson Vision Care, Inc. at 1-800-843-2020.

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ODs, MDs Unite Against Corneal Infection

Corneal infection, and its association with contact lens wear, was the prime focus of the AAO’s 2016 joint symposium with the American Academy of Ophthalmology yesterday afternoon, with presenters from across disciplines dissecting the problem and evaluating potential solutions. The discussion ranged from issues of strict scientific research to patient management and therapeutic options.

Moderated by Loretta Szczyzota-Flynn, OD, PhD, FAAO the speakers included Elmer Tu, MD, Thomas M. Lieman, MD, Deborah S. Jacobs, MD, Fiona J. Stapleton, PhD, FAAO, and Suzanne Fleiszig, OD, PhD, FAAO.

Classification and Mechanism
As an introduction, Dr. Jacobs spoke about appropriately identifying and classifying corneal infections in patients who wear contact lenses. “Don’t call everything an ulcer,” she warned. “Use the word ‘ulcer’ to mean microbial keratitis.”

Dr. Stapleton, professor and head of the School of Optometry and Vision Science at the University of New South Wales, Sydney, Australia, spoke on modifiable risk factors in mild and severe cases. “Human corneas rarely get infected,” she explained. However, studies show a major contributing factor is contact lens wear, especially extended wear, which has a five times greater risk than strict daily wear, she said. Other modifiable risk factors included Internet-purchased lenses, smoking, failure to wash hands and even only occasional overnight use. Contact with tap water, such as wearing contact lenses in the shower, was also associated with infection. “This was really a drive to try and understand risk factors for severe disease that we might be able to identify, understand and potentially modify,” she explained. In addition to the above habits, Dr. Stapleton and her team looked at climate (cases from a higher daytime temperature ended up being more severe) and storage case contamination, which accounted for 62% of severe cases alone.

Triggers, Zombies and Mechanisms
Dr. Fleiszig, a researcher of cytotoxic strains of Pseudomonas aeruginosa, brought the talk down to the microbial level. Pseudomonas organisms, she explained, inject toxins into healthy cells and actually blow them up, which Dr. Fleiszig demonstrated with dramatic video footage.

She also detailed the phenomenon of something she calls zombie bacteria—those that are not always dead when they appear to be. “When you try to kill microbes, they can go into these alternate states where they can be resistant to killing and then revive themselves later and turn back into normal bacteria.”

Stop and Chat
A unique aspect of this lecture was the presenters’ choice to pause and discuss relevant cases between speakers. For instance, at one point Dr. Tu posed questions to the panel on bacterial colonization. But the discussion was liveliest when the team started sharing insights on therapeutic options. Dr. Jacobs used case studies to quiz them on disease management, and the group provided a variety of responses. Some opted to start treatment with steroids, while others argued for a more conservative approach, waiting 48 hours after antibiotic treatment, in some cases.

“A lot of answers are going to come from looking at the biochemistry of the wearer,” Dr. Fleiszig said. “With newer methods, eye chemical analysis is becoming a possibility.”
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Neuro-Ophthalmic Disorders in Optometry

Lawrence Gray Symposium weighed treatment for kids, adults

While children may experience many of the same neuro-ophthalmic disorders as adults, their symptoms, along with associated diagnostic strategies and therapeutic interventions, may differ greatly. In fact, speakers at yesterday’s Lawrence Gray Symposium said handling suspicions of neuro-ophthalmic disorders in a pediatric population requires a completely different methodology than one that would be employed for adults.

“Children in general pose a little bit of a challenge to clinicians,” said Cristi Llerena Law, OD, FAAO, a member of the clinical faculty at SUNY College of Optometry. “It’s intuitive that we wouldn’t be able to rely on some of the clinical testing that we feel most comfortable with. We have lots of questions like: Can [children] adequately express a symptom? Do we know that what they’re saying is actually what they’re seeing or feeling? Am I getting an accurate history? In a neuro-ophthalmic exam, history becomes a critical component—how long a symptom has been there. ‘Is it chronic vs. acute?’ can guide an entire ophthalmic exam, as well as assessment and treatment.”

How Children Express Symptoms

The session offered up a number of case reports to demonstrate the nuances of diagnosing, treating and managing children with neuro-ophthalmic disorders. One case involved a 10-year-old male who presented to Patricia Modica, OD, FAAO, assistant clinical professor at the University Eye Center, SUNY College of Optometry, referred for evaluation of abduction deficit. The child had no symptoms (no double vision, visual acuity and visual field testing can help validate visual fields.

Etiologic considerations in young patients often point to developmental disorders, trauma and neoplastic diseases, and clinicians need to consider possible disadvantages/complications associated with imaging tests such as ionizing radiation, need for sedation and risks associated with sedation, Dr. Modica said. Also, the need to cater pharmaceuticals to a child’s body composition and physiological differences is a necessary component to treating and managing children, she added.

Pediatric and Adult Neuro-Ophthalmology

When it comes to pediatric neuro-ophthalmic disorders, Stacy Lynn Pineles, MD of the Jules Stein Eye Institute, UCLA Health, advised clinicians to consider that these disorders often have a congenital or genetic component to them and are less often vascular or degenerative conditions. Dr. Pineles presented several cases and examples involving children with bilateral disc edema, pseudotumor cerebri syndrome, bilateral prosis, pediatric ocular myasthenia gravis, pediatric optic neuritis and other less common neuro-ophthalmic disorders. She discussed clinical features in adults vs. children, her differentials for diagnosis, treatment strategies and results.

Rounding out the session, Joseph Louis Demer, MD, UCLA professor of pediatric ophthalmology, focused on strabismus, its causes, therapies for visual symptoms caused by the condition and surgery for strabismus caused by neurological and mechanical factors.
Controlling Myopia: Time for Change?
Research suggests a shift in the standard of care for myopia control is on the horizon

Few would dispute that the prevalence of myopia is extremely high, with one in three Americans having myopia, according to one speaker at the AAO/ARVO Joint Symposium “Control vs. Correction of Early Myopia: Has the Standard of Care Changed?” Of greater concern is the fact that the prevalence is still on the rise, said Jeffrey J. Walline, OD, PhD, FAAO.

“Just to put myopia into perspective, it costs the world $8.2 billion per year,” Dr. Walline said. “And yet, we don’t really even consider it a disease because it’s relatively easy to treat.”

Earl Smith, III, OD, PhD, FAAO, began Wednesday’s lecture with an emphasis on imposing myopic defocus, which, when done over a large part of the visual field, could be an effective way to slow the progression of myopia. Terri Young, MD, MBA, followed up with a discussion of new genetic approaches to control myopia that might one day be available for therapeutic use. David Berntsen, OD, PhD, FAAO, focused on spectacle correction and the idea that expanding the amount of defocus into the periphery can be beneficial for myopia control.

Padmaja Sankaridurg, BOptom, a professor at the School of Optometry and Vision at UNSW Australia, said the National Eye Institute’s discussion of the current standard of care for myopia neglects to mention the main problem—the axial elongation of the eyeball. She presented data on a sample of 6,000 Chinese children that shows how myopia control would reduce the expected burden of high myopia by nearly 40% over seven years. Data from several randomized clinical trials demonstrated that soft contact lenses led to myopia control at rates of 30% or higher compared with control lenses—and they also appeared to slow axial growth.

“Based on this data, should we be considering revising the standard of care? Absolutely, yes,” Dr. Sankaridurg said. “Multiple studies have given us the kind of myopia control consistent with the effects that we’ve seen from these independent studies across all parts of the world, so there’s no reason for us not to be able to provide it to our patients.”

Shifting focus to the use of atropine for myopic control, Dr. Walline said atropine slowed the progression of myopia by an average of 76%. Yet, few clinicians use the eye drops due to side effects such as mydriasis and cycloplegia, he added. However, an Asian study analyzed different concentrations of atropine to control myopia and found few side effects with use of 0.01% atropine. Another showed 0.01% atropine slowed myopia progression by 60%, with no rebound after two years of treatment and one year of no treatment; however, the atropine appeared to have no effect on the axial elongation of the eye.

“Low-concentration atropine should not be the standard of care because there’s too many questions remaining,” Dr. Walline said about the therapy, which is not yet commercially available in the United States. “However, I think there is enough evidence that it is an option that we can provide to our patients.”

Tracking Glaucoma Progression: Harder than it Looks

With the number of patients diagnosed with glaucoma likely to reach more than six million by 2050, this afternoon’s Glaucoma Section Symposium, “Identifying Glaucomatous Progression in Primary Eye Care: A Case-Based Approach,” is a timely discussion.1 Moderated by Blair Lonsberry, OD, MS, FAAO, glaucoma experts Danica Marrelli, OD, FAAO, and Leo Semes, OD, FAAO, FACMO, will use a case-based approach to help attendees better understand how to use new technologies to detect and monitor glaucomatous progression.

“Gauging the trajectory of progression is elusive, and using better and newer technology as an aid will help with this tedious process,” Dr. Semes says. “Often it is a combination of structural and functional changes.”

New diagnostic gadgets such as OCT have revolutionized how clinicians detect glaucomatous change, but the approach to interpreting the new data isn’t always straightforward. During this session, the speakers will walk attendees through several clinical cases and unpack the diagnostic data gathered from each to help attendees better understand the various reports. Armed with this information, clinicians can return to their practices better prepared to interpret OCT data beyond the color-coded distribution of norms provided by their OCT’s reference databases.

The session will also touch on the intra- and inter-visit variability inherent to OCT, as well as the benefits of using event- and trend-based analysis to gauge progression.

Although understanding how to detect glaucomatous progression with OCT is important, knowing what to do with that newfound information is the key. Drs. Lonsberry, Marrelli and Semes will not only help attendees interpret the data, but also apply that information to treatment. By the end of this session, attendees will be primed to use trend analysis to determine velocity of progression—key information to help determine whether or not a patient’s treatment plan is working.

The speakers will wrap up with a brief discussion on the frequency and extent of repeat testing after the initial diagnosis.

EDUCATE your patients on their condition and steps needed for cataract surgery

WORK with your surgeon for a better patient experience

KNOW what technologies your surgeon uses and why

DEVELOP an open communication protocol

DIFFERENTIATE yourselves as a team by working together for the best patient outcome

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Ezell Fellows: Adding Value with Contact Lenses

Today, 10am to noon, Room 304 A-D

Named after American Optometric Foundation founding president William C. Ezell, OD, the Ezell Fellowships are designed to encourage ODs to pursue full-time careers in research and education. From 10am to noon in room 304 A-D, three past awardees, now in different stages of their careers, are presenting on their research made possible by the early support of this fellowship.

Lakshman Subbaraman, PhD, BSOptom, FAAO will moderate presentations by Ray Applegate, OD, PhD, FAAO Jeffrey Walline, OD, PhD, FAAO and Ravi Bakaraju, BSOptom, PhD, FAAO.

Dr. Applegate will discuss the state of wavefront-guided scleral contact lenses for minimizing visual problems in highly aberrated eyes. Individually designed wavefront-guided scleral contact lenses can minimize visual problems such as ghosting, monocular double vision and visual fatigue associated with current contact lens corrections for aberrations resulting from keratoconus, corneal marginal degeneration and poor refractive surgery outcomes. Attendees will learn more about the advantages and limitations of such corrections and the current state of translation from the lab to clinical practice.

Dr. Walline’s presentation aims to help attendees understand the science behind myopia control using contact lenses and the safety involved in using them with the pediatric population. With a firm grasp on the mechanics, attendees will be better equipped to maximize myopia control and talk to parents about myopia control options. By the end of his presentation, attendees should understand why contact lenses provide the best myopia control without side effects.

Dr. Bakaraju will address recent lens design developments for presbyopia and myopia control. Efforts to optimize visual performance across a broad range of distances has been a quest for quite some time, and although newer designs are intended to deliver correction for far, intermediate and near distances, they often result in a compromised visual experience. Attendees of the session will gain insight into designs that aim to achieve a full range of corrections without significant compromises.

“In addition to vision correction, contact lenses provide value-added benefits, such as slowing the progression of myopia in children,” says Dr. Subbaraman. “Over the past few years, several contact lenses have been designed to satisfy the visual needs of presbyopes and astigmats. This session will provide insights into the recent developments in lens designs for astigmatism, presbyopia and myopia control and will be extremely beneficial for practicing optometrists and researchers.”

Today’s Poster Sessions

Posters will be displayed from 9am to 4pm in Ballroom AB. Odd numbered authors will be present in the morning hours, 10am – noon, and even numbered authors will be present in the afternoon, 2pm – 6pm. Topics include:

- Cornea/Anterior Segment/Contact Lens
- Health Policy/Health Care Delivery
- Low Vision
- Neuro-Ophthalmic / Orbit
- Optics/Refractive Error/Refractive Surgery
- Pediatric Optometry/Binocular Vision
- Ocular Physiology
- Optics/Refractive Error/Refractive Surgery
- Optometric Education
- Posterior Segment
- Systemic & Other Disease

Tomorrow’s Paper Sessions

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<td>Contact Lens Optics: Myopia to Presbyopia</td>
<td>211AB</td>
<td>8am – 8:45am</td>
</tr>
<tr>
<td>Anterior Segment/Corneal Physiology</td>
<td>211AB</td>
<td>9am – 10:30am</td>
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Interested in presenting a paper or poster at Academy 2017 Chicago? The Scientific Program abstract submission window will be open from May 1 through May 31, 2017. More information will be provided online at www.aaopt.org.
AMERICAN OPTOMETRIC FOUNDATION

Today is the last day to participate in the AOF silent auction at https://www.32auctions.com/AOF Auction.

Also, don’t forget to scan the QR code to download your FREE copy of Howard and the Amazing Eye Exam. Once 2,020 attendees download the book, the Alcon Foundation will donate $25,000 to the AOF to support pediatric optometric research.

RESIDENTS DAY AT ACADEMY 2016 ANAHEIM

Saturday, November 12, 2016
Residents Day is a forum where residents have the opportunity to present their interesting grand rounds case reports or the results of their research projects! Papers will be presented from 8am – noon in Room 303 A-D, and posters will be presented from 1:30pm – 3:30pm in Ballroom A-B.

ANNUAL FELLOWSHIP BANQUET

Saturday, November 12, 7pm - 10pm (Black Tie Optional)
Join us in recognizing the new Fellows and Diplomates! Enjoy the camaraderie as we celebrate those reaching this milestone in their careers and toast to the ending of another great Academy meeting.

Use your banquet ticket, which was printed with your badge at registration, to get into the event. Seating is first come, first served.

Please note! If you do not plan on attending the banquet, please stop by the Academy’s booth in the Exhibit Hall (#461) to donate your ticket to a student attendee.

AMERICAN RED CROSS BLOOD DRIVE

The Academy invites you to give back during Academy 2016 Anaheim and participate in our second blood drive benefiting the American Red Cross. All blood donations will directly benefit local Anaheim hospitals.

Date: Friday, November 11, 2016
Hours: 10am – 6:30pm
Location: Anaheim Convention Center, Room 208B
Donors will receive snacks, drinks and a T-shirt. Please join us in supporting the local Anaheim community!

JOIN US AT THESE FUTURE MEETINGS!

Academy 2017 Chicago .....................................................October 11-14, 2017
Academy 2018 San Antonio ..............................................November 7-10, 2018
Academy 2019 Orlando .....................................................October 23-26, 2019
Academy 2020 Nashville .....................................................October 7-10, 2020
Academy 2021 Boston .......................................................November 3-6, 2021
Academy 2022 San Diego ...................................................October 26-29, 2022
Academy 2023 New Orleans ..............................................October 11-14, 2023
Academy 2024 Washington DC .................................November 6-9, 2024
Academy 2025 Boston .......................................................October 8-11, 2025
Find your inspiration for excellence at Academy 2017 Chicago. Join us in Chicago for four days of brilliant speakers, clinically-relevant CE sessions, the latest products and technology in the exhibit hall, captivating papers and posters and cherished social events.

For more information, visit www.aaopt.org.
AAO Exhibits

The Academy Exhibit Hall is the perfect place to experience cutting edge products and services. Remember, badges are required for admission into the Exhibit Hall.

Exhibit Hall.

AAO Exhibits

ARVO – Association for Research
Art Optical Contact Lens, Inc.
Annidis Corporation
Canon USA, Inc.
American Optometric Association
American Academy of Optometry
Euclid Systems Corporation
Eye Eco, Inc.
Eye Designs LLC
Essilor of America
Enhanced Vision
Digital Heat Corporation
Clear Eyes
BlephEx LLC
Blink UV
Blanchard Contact Lens, Inc.
BioD, LLC
Beye.com
Bausch + Lomb
Akorn Pharmaceuticals
AccuLens Inc.
All About Vision
Allergan
American Academy of Optometry
American Board Certification
Medical Optometry
American Board of Optometry
American Foundation for the Blind
American Optometric Association
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ARVO – Association for Research in Vision and Ophthalmology
Bausch + Lomb
Eye Designs LLC
Beye.com
Bio-Tissue
BioD, LLC
Blanchard Contact Lens, Inc.
BlepEX LLC
Brien Holden Vision Institute
Bruder Healthcare Company
Bryn Mawr Communications LLC
Canon USA, Inc.
Carecredit
Chadwick Optical
ChongQing Sunkingdom
Medical Instrument Co., Ltd.
Clear Eyes
Coburn Technologies
College of Optometrists in Vision Development (COVD)
Comfort Vision
Compulink Business Systems
CooperVision, Inc.
Cypress Ophthalmology Group
Designs for Vision, Inc.
DGH Technology Inc.
Digital Heat Corporation
Dropsey's
Elsevier, Inc.
Enhanced Vision
Envision University
Eschenbach Optik
Essilor of America
Euclid Systems Corporation
Eye Care and Cure
Eye Designs LLC
Eye Eco, Inc.

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Note to those interested in booth space for Academy 2017
Stop by the Exhibit Manager’s office located near Exhibitor Services and ask for Betty Taylor. She will be happy to help you select a prime booth location and get you registered for 2017.

Remaining Exhibit Hall hours are as follows:
FRIDAY, Nov. 11
11am – 3pm
The Academy Presents: 2016 Awards

We look forward to seeing you at the 2016 Awards and Lectures Ceremony this morning from 8am to 10am in Ballroom E of the Anaheim Convention Center. Help us celebrate the 2016 award recipients who have demonstrated their contributions to the advancement of optometry and vision science! Join us to hear the Charles F. Prentice Lecture and the Glenn A. Fry Lecture (one hour of CE provided for the two-hour program) and to recognize and honor these outstanding individuals.

Charles F. Prentice Medal and Lecture
The Charles F. Prentice Medal is the Academy’s top award and lecture at the annual meeting and is presented to an individual who has made a significant contribution to the advancement of knowledge through research in the visual sciences.

The recipient of this year’s Prentice Medal is Martin S. Banks, MA, PhD. Professor Banks is a world-class vision researcher who investigates how humans use vision to acquire precise information about the spatial layout of the world. The first half of his career was dedicated to infant vision and development. His work helped to shape our understanding of human visual development and has guided optometric practice. During the second half of his career he has branched out into a variety of topics including stereopsis and depth perception, binocular vision, visuo-vestibular interactions, visual spatial relationships and associated topics. His work has also been particularly relevant to critical issues in optometric practice.

The Glenn A. Fry Award and Lecture
The Glenn A. Fry Award and Lecture is sponsored by the American Optometric Foundation and recognizes a distinguished scientist or clinician for his or her current research contributions.

Erica L. Fletcher, MScOptom, PhD, FAAO, is the recipient of the 2016 Fry Award. Dr. Fletcher’s research is focused on retinal disease, including retinal vascular disease and retinal neurodegeneration. Her body of work has significantly advanced our understanding of both normal and abnormal retinal biology. Her research has had a particular emphasis on determining the causes for photoreceptor death, methods to save and replace photoreceptors and the role of glia in maintaining the health of the retina.

Irvin M. and Beatrice Borish Award
The Borish Award recognizes an outstanding young researcher who has shown exceptional promise to conduct independent optometric research directly related to etiology, prevention, detection, diagnosis or management of clinical eye disorders.

Nimesh Patel, OD, PhD, FAAO, is the Borish Award recipient for 2016. Dr. Patel is an outstanding young clinician-scientist who, as a young investigator, has demonstrated exceptional promise to conduct independent research in the area of structure-function relationships in glaucoma. His work is unique in that it involves both experimental glaucoma in animal models and evaluation of patients with glaucoma. Additionally, he has contributed to our understanding of eye conditions experienced by astronauts. Dr. Patel has had experience in a wide variety of topics involving ocular disease, with particular emphasis on glaucoma.

AAO-Essilor Award for Outstanding International Contributions to Optometry
The International Award recognizes an individual(s) or organization whose direct efforts and contributions have resulted in unquestionable significant and extraordinary advances in optometry and eye care internationally.

This year’s International Award is presented to Wolfgang Cagnolati, MS, DSc, FAAO. Dr. Cagnolati is a highly respected, internationally known clinician, educator and professional leader. During his involvement in the European Council of Optometry and Optics, he actively took part in the development of optometry in Europe and the design and structure of the European Diploma in optometry, which now is the current standard for optometric education in Europe. His work has emphasized the role of the optometrist as a primary eye care provider and has helped to unify the education, training and advancement of optometry in Europe.

William Feinbloom Award
The William Feinbloom Award is presented to an individual who, through discovery and innovation, has made a distinguished and significant contribution to the advancement of clinical practice, and thus to the visual enhancement of the public.

The 2016 Feinbloom Award recipient is Rachel A. Coulter, OD, FAAO. Dr. “Stacey” Coulter’s research and scholarship has had a significant impact on the literature associated with pediatric eye care, pediatric pharmacology and the treatment of eye movement disorders and behaviors in autism. She demonstrates her clinical research expertise while raising the standards of routine clinical optometric practice. Dr. Coulter is an outstanding role model for individuals aspiring to combine research and clinical practice in their career goals.

Julius F. Neumueller Award in Optics
The American Optometric Foundation’s Julius F. Neumueller Award in Optics is awarded to a student pursuing the Doctor of Optometry degree in a school or college of optometry who submits a first-authored original research paper on one of the following topics: Geometrical Optics, Physical Optics, Ophthalmic Optics, Optics of the Eye.

This year the Awards Committee selected the research article, “Peripheral Defocus of Myopic Eyes with Spherical Soft Contact Lenses,” by Kelly E. Moore, OD, MS. The article was written during her fourth year of optometry school at the University of Houston College of Optometry. Throughout her optometric training, Dr. Moore has maintained an active and productive role in clinical patient management and research evaluation of important clinical issues.
Garland W. Clay Award
The Garland Clay Award is presented to the authors of the manuscript published in Optometry and Vision Science that has been most widely cited in world research literature in the preceding five years and has the vote of the Optometry and Vision Science Editorial Board.

The 2016 Clay Award paper is: “Corneal Deformation Measurement Using Scheimpflug Noncontact Tonometry,” and its authors are: Ying Hon, BSc(Hons) Optom, and Andrew K.C. Lam, PhD, MPhil, FAAO (pictured from left to right). The article was published in Optometry and Vision Science, 90(1):e1-e8, January 2013.

Vincent Ellerbrock Clinician Educator Award
The Vincent Ellerbrock Clinician Educator Award is presented to a distinguished clinician who has made outstanding and sustained contributions to the Academy’s Lectures and Workshops program.

The 2016 Ellerbrock award recipient is Richard London, MA, OD, FAAO. As a recognized clinician and educator worldwide, Dr. London has annually presented one or more lectures as part of the Academy’s Lectures and Workshops program for more than 33 years, in addition to hundreds of invited lectures worldwide. His contributions are particularly noteworthy in the area of neuro-ophthalmic disorders, an area that is now receiving much-needed attention in optometry. Dr. London has been one of the early leaders in this area and has been instrumental in providing useful clinical information to optometrists for improving patient management.

Life Fellowship Award
The distinction of Life Fellowship was created to recognize Fellows who, through long-time membership in the Academy, have rendered distinguished service to the science and art of optometry.

This year there are two recipients of this award.

Tony Adams, OD, PhD, FAAO, was a dynamic leader of the Academy as president in 1999 and 2000. He also helped to reshape the Academy’s journal, Optometry and Vision Science, as editor-in-chief for 13 years. For many years, he has demonstrated exceptional contributions to optometry in areas of leadership; research on diabetic eye disease, color vision and other topics; teaching; and administrative activities. The Life Fellowship Award is a small means of recognizing the tremendous benefit that he has contributed to the advancement of optometry.

Thomas L. Lewis, OD, PhD, FAAO, has a long history of distinguished service to the art and science of optometry and to the Academy, culminating during his term as President in 2003 and 2004. As President of the Pennsylvania College of Optometry from 1989 to 2011, he demonstrated his significant commitment to the profession. He has also been a coauthor of several comprehensive books on glaucoma and has provided optometrists with valuable insights related to the care and management of glaucoma patients and those at risk of developing glaucoma. His contributions span a large range of scholarly, clinical and research activities.

Michael G. Harris Award for Excellence in Optometric Education
Presented by the American Optometric Foundation, the Harris Award recognizes an optometric educator who has demonstrated ongoing and consistent excellence in education of optometry students and/or advancement of optometric education.

This year the Harris Award is awarded to Timothy B. Edrington, OD, MS, FAAO. For nearly 40 years, Dr. Edrington has advanced the knowledge of contact lenses and their application to vision correction. His most significant contribution to optometry, however, is his extreme talent as a teacher. Dr. Edrington is an outstanding example of an optometrist with a passionate, strong commitment to providing excellence in optometric education.

A-OK With OCT-A
Get to know the next big thing in imaging — Today, 3pm to 4pm, Room 210 A-D

Optical coherence tomography angiography (OCT-A) is a noninvasive, dyeless imaging technology that may just be the wave of the future.

Carolyn Majcher, OD, will share her expertise on this emerging technology, including its advantages and limitations compared with conventional fluorescein angiography and its role in the diagnosis and management of a variety of retinal conditions (diabetic retinopathy, retinal occlusive disease and age-related macular degeneration). The lecture will go into depth on the images OCT-A can create and how to read them for pathologies such as diabetic retinopathy, branch retinal vein occlusion and more.

The technology provides a whole host of new diagnostic data, including volumetric and 3D maps of the retinal and choroidal vascular systems, as well as insight into blood flow—all of which allow for precise localization of vascular lesions and allows the user to make structural correlations, such as localizing an area of choroidal neovascularization to a shallow pigment epithelial detachment.

The lamina cribrosa as observed with OCT-A.
2017 MEETINGS

Aspen, CO
February 17-21, 2017
Winter Ophthalmic Conference
(Formerly SkiVision)
Program Chairs:
Murray Fingeret, OD & Leo P. Semes, OD

Charleston, SC
March 24-26, 2017
Program Chair:
Paul Karpecki, OD

San Diego, CA
April 20-23, 2017
Joint Meeting: NT&T/OCCRS
Program Chair:
Paul Karpecki, OD

Orlando, FL
June 8-11, 2017
Program Chair:
Paul Karpecki, OD

Philadelphia, PA
November 3-5, 2017
Program Chair:
Paul Karpecki, OD

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Getting to the Bottom of Ocular Pain

New insights may help clinicians better understand, monitor and treat this sometimes debilitating symptom

Yesterday morning’s Monroe J. Hirsch Research Symposium, “The Distressed Eye: Ocular Pain,” gave attendees a closer look at the mechanics of ocular pain, methods of measuring it and how it impacts patients with dry eye.

After a brief video highlighting the life and work of Dr. Hirsch, Carlos Belmonte, MD, PhD, dove right into his research on the neurobiological mechanisms of pain, homing in on the role of mechano- and polymodal receptors, and cold thermoreceptors in particular. Although neglected in the research recently, Dr. Belmonte said, cold thermoreceptors are integral to understanding why inflammation and peripheral nerve injury are accompanied by ocular pain. “With patients with nerve damage, they have less sensitivity, but they have pain,” Dr. Belmonte said. “And why do they have pain? Because those nerves now have spontaneous activity in the broken endings [...] and those signals go to the brain and produce a sensation of discomfort or pain.”

He then discussed these receptor responses as seen with damage caused by LASIK, allergic conjunctivitis and dry eye, to name a few. Building on this foundation, Trefford Simpson, DipOptom, MS, PhD, discussed just how clinicians can measure their patient’s pain. “The problem with understanding pain in humans, of course, is [...] you can induce pain relatively well, but actually measuring it is not easy to do,” he said.

Dr. Simpson’s research into corneal esthesiometry suggests “there is some sort of scaling constancy that allows you to go out and, more or less, choose whatever scale you want to get a sense of the pain on the ocular surface.”

Dr. Simpson then touched on recent research that applies corneal esthesiometry to better understand ocular pain associated with contact lens wear, refractive surgery and diabetic neuropathy, among others.

The program’s final speaker, Nancy McNamara, OD, PhD, FAAO, took all of this information and focused it on dry eye—more specifically Sjögren’s syndrome, which “affects about four million people in the United States,” Dr. McNamara said, “and a lot of these patients are in pain. Depending on what literature you read, anywhere from 40% to 70% of these patients have some type of peripheral neuropathy, which can cause considerable, and in some cases debilitating, pain.”

She also walked attendees through new diagnostic criteria for Sjögren’s syndrome, as well as the three R’s of treatment: rehydrate, reduce inflammation and retard evaporation. The presentation then came full circle, with a call for research into new therapies to restore and regenerate the nerves of the cornea to combat ocular pain associated with dry eye.

The session wrapped up with a lively Q&A, during which attendees asked for clinical tips such as prescribing steroids and choosing the best omega-3 fatty acid supplements.
Academy 2016 Scientific Snapshots

The AAO’s Wednesday morning press conference offered attendees a snapshot of top scientific research and innovative products and services presented this year. Moderated by Edward Chu, OD, FAAO, the session highlighted these key findings:

• How sensitive are preschool vision screening techniques in detecting binocular problems like amblyopia? A study by NECO’s Bruce Moore, OD, FAAO, assessed methods of screening for moderate hyperopia, one of the highest risk factors, and found the best techniques to be noncycloplegic retinoscopy or Retinomax.

• Contact lenses can act as a foreign body, encouraging infection, said Debarun Dutta, Optom., PhD. He sought to determine whether an antimicrobial coating on contact lenses would reduce infections in an animal model and found evidence to support the hypothesis. Nine control subjects experienced infection but only two test subjects did.

• The University of Waterloo’s Alisa Sivak conducted six focus groups with patients ranging in age from 17 to 71 to assess patient sentiment and trends in online eyewear purchasing. Attitudes were mixed, with some subjects confident in the viability of online purchase (given the cost and convenience) and others reluctant to make the viability of online purchase (given the cost and convenience) and others reluctant to make buying decisions.

• Although thousands of papers focus on intraocular pressure, “the whole objective is to save [...] vision, yet no one has published much on visual field survival,” said William Sponsel, MD, FACS, as he presented the findings from his scientific paper, which showed that the brain and eyes use compensatory mechanisms that allow the patient to resolve defects by synthesizing the fields of each eye. He also highlighted the possible impact on Parkinson’s and Alzheimer’s care from eye exams.

• Though electronic records are here to stay, and have become a vital component of care, more research is needed to determine how to make EMR systems useful tools, including teaching optometrists how best to practice while using them, said Aurora Denial, OD, FAAO. Strikingly, her study revealed that 68% of participants copied and pasted from previous records, which pose risks of medical error.

• Can tobacco cessation efforts reduce smoking in optometric patients? “We see about a 9% to 15% cessation rate vs. 2% to 9% rates in control groups,” said Stanley Hatch, OD, MPH, FAAO. His study determined that 14.4% of patients quit smoking following initiation of tobacco cessation efforts.

• OCT angiography offers significant clinical advantage relative to traditional fundus photography, said Jessica Steen, OD, FAAO. Dr. Steen presented slides demonstrating the obvious presence of microaneurysms on OCTA—then overlaid them on fundus photos to show the advantage that OCTA confers in the ability to detect these early signs of retinopathy.

• Advances are changing the way you manage patients with geographic atrophy secondary to AMD, said Mark Dunbar, OD, FAAO, who described recent improvements in the staging of disease progression and pharmacological interventions, as well as the recent adoption of an ICD-10 code to spur clinical efforts.

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Efforts From Industry

• Manish Gupta of Vivid Vision announced an at-home vision therapy device for binocular vision problems, called Vivid Vision Home. Patients do an in-office binocular evaluation to see if they’re a good fit and are sent home with information on how to get started. Doctors can track usage, see stats and manage treatment remotely.

• The new Oculus Pentacam AXL allows doctors to measure the back surface of the cornea as well as the front surface curvature. Assessment of back surface characteristics is vital in identifying keratoconus, said Andrew Morgenstern, OD, FAAO, speaking on behalf of the company.

• Michael Johnson of Art Optical spoke about the company’s new scleral lens, a 16.5mm design called the Ampleye. The new lens is fit according to corneal condition and sagittal depth. It was designed with four optical zones and allows independent zone adjustments, with the ability to adjust height to the outer three zones by up to 375 micronmeters to address scleral toricity.

• Blanchard Contact Lenses discussed its new Onset A lens, specifically designed to fit better the anatomical characteristics seen in patients of Asian ethnicity. The new lens design has a smaller diameter, an altered paracentral-to-edge geometry and a peripheral curve system, according to the company’s Lee Buffalo.

• Digital Heat debuted a new wearable eyelid heating device that provides heat where needed, at a precise and a constant temperature over time. The device also conforms to the eyelid shape, something that traditional microwave or chemical compresses don’t do, said the company’s John Devine.

• Chris Harmon of Shire spoke on the company’s growing business and new investments following the launch of Xidra for dry eye. The company has invested $700 million into both early- and late-stage assets including agents for dry eye and conjunctivitis, he said.

• Annidis recently released its RHA retinal imaging device, which produces sets of images much like an MRI, scanning deep into the retina and the choroid. Such a multilayered approach allows the doctor to see when one anomaly is hidden underneath another, said the company’s Cameron Bramwell.

• Gayle Claman, Senior Director of Scientific Education for ARVO, discussed the scientific organization’s initiative to highlight the return on investment in vision research, using OCT technology as a success story. This is ARVO’s first rollout of a public patient advocacy and outreach, she said.

• Bryan Woynak, OD, FAAO, of Orcam Technologies demonstrated the MyEye device, a spectacle-mounted camera system for low vision patients that can recognize faces and scan text from multiple everyday sources (e.g., newspapers, product packaging), then convert the data to speech. Patients wear an earpiece to hear the computer-generated translation.

• Topcon recently released its Maestro OCT device in the US. The system scans both eyes and produces simultaneously an OCT scan and a true-color fundus image, allowing doctors to look at the structure of the eye as well as the location of the pathology and see them directly together, said the company’s Mark McKee.
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