



OPENING OUR EYES

**A Discussion on the Future of
Optometric Education**

Thursday, March 14, 2019
Hyatt Regency Crystal City
Arlington, Virginia



ASSOCIATION *of*
SCHOOLS *and* COLLEGES
of OPTOMETRY

GOAL STATEMENT

Optometry is at a crossroads, and optometric education is positioned to help guide how optometry will thrive in the coming years. It is time for a new discussion on the state of the profession, its future, and the best way for optometric educators to prepare students for that future.

PROGRAM AGENDA

7:00 am – 7:45 am **Registration**

7:45 am – 8:00 am **Welcome/Introductions**
The impetus for and format of this summit David Damari

8:00 am – 9:15 am **Quality & Quantity**

Until a decade ago, there were 17 US schools and colleges of optometry, and the newest of those was 25 years old. In 2013, three new institutions graduated their first classes, and three more programs have admitted students since then. Other institutions have either made public plans to start new optometric programs or have quietly inquired about doing so. As the number of institutions has swelled from 17 to 23, the national applicant pool to optometry has remained flat for most of those years and in fact decreased by 8% in 2017-18 compared to the year before. The availability and minimum competence of faculty members in optometry is an additional important consideration.

8:00 am - 8:05 am	Karla Zadnik (moderator)
8:05 am - 8:20 am	Lewis Reich (keynoter)
8:20 am - 8:35 am	panel discussion – Carmen Barnhardt, Scott Edmonds, Earl Smith
8:35 am - 9:15 am	discussion with audience

9:15 am – 9:30 am **Break**



9:30 am – 10:45 am **Scope Practiced vs. Scope of Practice**

The profession of optometry has expanded its scope from its “drugless profession” history across the past four decades. As individual states found legislative opportunity, scope expanded, first into the use of diagnostic pharmaceuticals, then into the use of therapeutic pharmaceuticals at various tiers (topical vs. oral, for example). Not surprisingly, ophthalmology and medicine has fought back, especially in the area of therapeutics. Optometry finds itself at a new threshold, including laser therapy, minor surgical procedures, and primary medical care, with some states already having granted optometrists privileges within these new scopes of practice. Indeed, some would argue that the demographics and changes within ophthalmology training will ensure that there will be continuing pressure for optometry’s scope to expand.

Schools and colleges of optometry are ethically bound to educate students to the highest scope of practice licensed in any state. That presents substantial difficulties when, for example, surgical and laser experience is needed in a state where that practice is not authorized; to date, the schools and colleges have managed to

educate appropriately. How do we continue to provide the highest level of education while guaranteeing state licensing boards that our graduates have adequate knowledge, skills, and experience to practice at this highest level?

9:30 am - 9:35 am Elizabeth Hoppe (moderator)
9:35 am - 9:50 am Ed Hernandez (keynoter)
9:50 am - 10:05 am panel discussion – Pat O’Neil, James Sandefur, Tammy Than
10:05 am - 10:45 am discussion with audience

10:45 am – 11:00 am BREAK

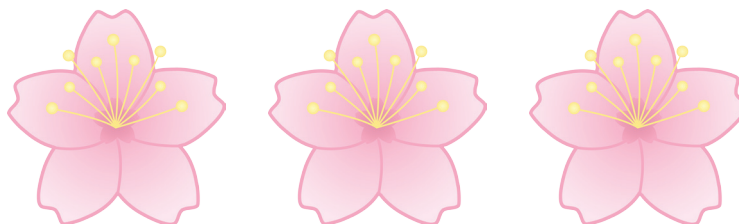


11:00 am – 12:15 pm Two-Tiered Profession

In contrast to education provided at optometry schools and colleges, the Lewin Workforce Study reported that only 20-35% of optometrists practice full-scope care. In the meantime, we have seen the rise in demand for optometrists in corporate settings that limit the ability of the employed optometrist to provide higher-level care. The emerging landscape is one where these highly educated graduates seek to practice at the highest scope, yet they are finding jobs at a reduced scope, essentially as refractionists who do cursory disease detection and regularly refer patients for advanced diagnosis and treatment. In addition, ophthalmology is increasingly hiring cost-effective optometrists. In multi-disciplinary practices, a residency-trained optometrist can practice full-scope care, although frequently under the watchful administrative eye of practice managers. Are we already a two-tiered profession or, if not, are we headed inexorably in that direction?

11:00 am - 11:05 am Barbara Caffery (moderator)
11:05 am - 11:20 am Susy Yu (keynoter)
11:20 am - 11:35 am panel discussion – Kevin Alexander, Diane Calderon, Carl Spear, Chris Wilmer
11:35 am - 12:15 am discussion with audience

12:15 pm – 1:15 pm LUNCH



1:15 pm – 2:30 pm Student Debt

The cost of becoming an optometrist is already being labeled a bad investment by some sources (albeit using very questionable data). In 2013, an article in the *New England Journal of Medicine* showed a ratio of 1.3:1 (average student debt at optometry graduation compared to the median one-year income for an optometrist), with only veterinary medicine having a higher ratio at 1.6:1. How do we keep educating our students at the highest level, giving them experiences on the latest equipment and doing advanced procedures, while keeping the debt ratio at a manageable level?

1:15 pm - 1:20 pm	Jenny Coyle (moderator)
1:20 pm - 1:35 pm	Mark Colip (keynoter)
1:35 pm - 1:50 pm	panel discussion – Justin Griest, David Heath, Danica Marrelli
1:50 pm - 2:30 pm	discussion with audience

2:30 pm – 3:00 pm BREAK



3:00 pm – 4:15 pm Evolution vs. Inertia

Many disciplines and businesses, including healthcare, have been affected by disruptive technology. Optometry is no exception. The experiences of other industries illustrate that it is probably futile to attempt to hold back all such technology. The concept of the only way for good service to our patients is through a comprehensive eye examination with a single doctor is unlikely to survive the next decade. How do we harness the technology and make eye examinations more efficient, maximize optometrist-to-patient contact time for communication rather than measurement, optimize medical care within our daily routines, and incorporate technologies, such as telemedicine, to help deliver eye care to those with limited access?

Other invasive technologies includes the advent of social media. Optometrists can communicate with each other -- for better or worse -- in real time. They can use social media to help with difficult cases; they also use it to complain about patients and the profession. Social media has not been fully harnessed by either advocacy or education efforts. Prospective students may glean negative information about the profession without any peer review of the points made or any access to dissenting opinions. How can the profession and its educational institutions successfully manage information in the age of social media and wide-ranging access to information of varying accuracy?

3:00 pm - 3:05 pm	John Flanagan (moderator)
3:05 pm - 3:20 pm	Howard Purcell (keynoter)
3:20 pm - 3:35 pm	panel discussion – Melissa Bailey, Jorge Cuadros, Alan Glazier
3:55 pm - 4:15 pm	discussion with audience

4:15 – 4:30 pm Conclusion/Wrap Up David Damari

PRESENTERS

(in alphabetical order by last name)

Kevin L. Alexander, OD, PhD, FAAO



Kevin L. Alexander, OD, PhD, FAAO is the President of Marshall B. Ketchum University (MBKU) in Fullerton, California. He earned his OD and PhD degrees at The Ohio State University (OSU). Following graduation, he was an OSU professor, teaching ocular disease and pharmacology, while he began his practice in Columbus, Ohio. Returning to Toledo, Ohio in the late eighties, he served as Center Director of The Eye Center of Toledo joining with ophthalmologists to pioneer optometric co-management of cataract patients. He later joined Retina Vitreous Associates advancing optometric co-management of retina patients. During his time in clinical practice, Dr. Alexander established a residency program in ocular disease and is credited with creating one of the first fellowships in vitreoretinal disease for optometrists.

In 2000, Dr. Alexander left clinical practice to become Dean of the Michigan College of Optometry at Ferris State University. In 2008, he became President of Southern California College of Optometry and expanded its mission to include interdisciplinary health care education by creating MBKU. Dr. Alexander was named the Founding President of MBKU in 2013, adding physician assistant studies and pharmacy to join the century-old optometry program. From 2013 to 2018 construction projects doubled the size of the MBKU campus.

Dr. Alexander has presented more than 275 lectures in 15 states, the US Virgin Islands, and five countries. He has authored numerous articles and edited a textbook. He is a Diplomate of the ABO. Dr. Alexander has served as President of the Ohio Optometric Association, ASCO and the AOA. He has received the Ohio State University Alumni Award for Distinguished Teaching, the H. Ward Ewalt Award for Distinguished Professional Service, was named an Ohio Optometrist of the Year, and is a National Optometry Hall of Fame inductee.

Melissa Bailey, OD, PhD



Melissa D Bailey, OD, PhD is an associate professor at The Ohio State University (OSU) College of Optometry. She earned a Bachelor of Science in Neuroscience from Muskingum University (1997) and subsequently earned a Doctorate of Optometry (2001), and Master of Science (2001) in vision science, and a Doctor of Philosophy in vision science (2004) from OSU. Her laboratory is devoted to helping children and adults see better and read better. Dr. Bailey is a serial entrepreneur with 19 issued or allowed patents and 13 pending patents, both US and foreign. She is actively working on two major commercialization projects, The Eye Scan App (TESA) and the Buck-Eye Contact Lens Design.

Sight4All, Inc., a startup company spun out of OSU, is working with Dr. Bailey to bring TESA to market. This software application employs multiple patented methods to provide two new vision tests, autorefractometry and a Digital Cover Test. TESA's patented autorefractor is designed with a novel method for detecting ambient room lighting that has reflected from the back of the eye. The use of only ambient lighting, without bright flashes of light, and the non-contact nature of the test allows a comfortable and non-invasive autorefractometry measurement for patients of any age. TESA's Digital Cover Test is a patented, automated version of a standard cover test. Without the need for prisms, the app guides the user

through the appropriate cover test sequence and provides both phoria and tropia measurements in any gaze.

Dr. Bailey has also collaborated with Joseph T Barr, OD, MS, to develop the Buck-Eye Contact Lens Design. This patented novel soft contact lens design has been licensed to a second OSU startup company, Lentechs, LLC. A lenticular and lid-attached fit is used for the first time in a soft contact lens design to provide multiple benefits to the patient, including a progressive addition for presbyopia and stabilization of a toric or toric-presbyopic lens design, along with other benefits.

Dr. Bailey has also extensively studied ciliary muscle development and how it relates to myopia development, accommodative function, and academic achievement in children and adults. Her first issued patent, in collaboration with Chiu-Yen Kao, PhD, was a method for segmenting optical coherence tomography (OCT) images of the ciliary muscle. Multiple graduate students from her laboratory have helped her to demonstrate how the OCT can be used to determine the dimensions and function of the ciliary muscle across a wide variety of ages. In addition to her research, Dr. Bailey enjoys mentoring graduate students and teaching Contact Lenses I to third-year optometry students. She has served the AAO on both the Membership and Awards Committees, and also as a member of the Board of Directors for the AAO Foundation.

Carmen Barnhardt, OD, MS Ed



Carmen Barnhardt is the Vice President for Student Affairs at Marshall B. Ketchum University (MBKU). Previously, she served as the Assistant Vice President for Student Affairs where she established the Student Achievement Center, Student Leadership Certificate program and other student services.

Dr. Barnhardt has been a faculty member at the MBKU, Southern California College of Optometry (SCCOMBKU) for 20 years. She received her Doctor of Optometry and residency certificate in Pediatric Optometry and Vision Therapy from SCCOMBKU.

She is a fellow in the AAO and in the College of Optometrists in Vision Development and a Diplomate in the Pediatric, Binocular Vision, and Perception Section of the AAO. Dr. Barnhardt completed a master's program in education at California State University, Fullerton and a Graduate Certificate in Student Affairs Administration at Colorado State University.

Her areas of interest include leadership development and student government, student support programs and services, including academic and professional development, learning resources and supporting healthcare students with disabilities.

Barbara Caffery OD, PhD, FAAO



Dr. Barbara Caffery graduated from the New England College of Optometry in 1977. In 2009, Dr. Caffery completed her PhD programme in Vision Science at the University of Waterloo upon defending her thesis entitled, *Sjogren's Syndrome: A Clinical and Biochemical Analysis*. Dr. Caffery practices at Toronto Eye Care in downtown Toronto and also participates in two hospital-based clinics at the University Health Network Multi-Disciplinary Sjogren's Syndrome Clinic and the Therapeutic Contact Lens Clinic at Kensington Vision and Research Centre.

Her areas of expertise include dry eye disease and contact lenses. Dr. Caffery has completed several clinical trials in dry eye treatments and has also widely published in the areas of contact lenses, dry eye and Sjogren's Syndrome. She presently serves

as the President of the AAO. She also serves on the Board and Medical Advisory panel of the Sjogren's Society of Canada.

Dr. Caffery has lectured frequently in the area of contact lenses, dry eye and Sjogren's syndrome at the AAO and other state and regional venues. She continues to serve as a guest lecturer at the School of Optometry and Vision Science at the University of Waterloo.

Diane E. Calderon, OD, FAAO



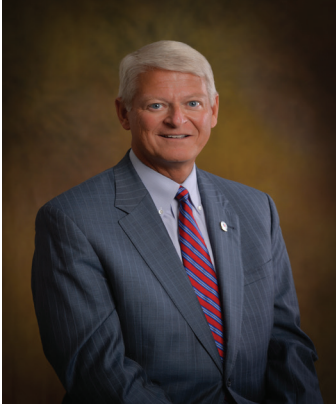
Dr. Calderon received her Doctor of Optometry degree from the Pennsylvania College of Optometry (PCO) in 2003, and completed a residency in Primary Care Optometry at The Eye Institute at PCO in 2004. She began her career as an Assistant Clinical Professor at Nova Southeastern University (NOVA), College of Optometry, and served in various roles during her tenure, including supervision of third and fourth year interns, laboratory and didactic instruction, and being the faculty advisor for a number of student associations. While on faculty at NOVA, she actively pursued scholarly activities while also participating in numerous mission trips with Student Volunteer Optometric Services for Humanity.

In 2008, Dr. Calderon relocated to New York and began working at a large OD/MD private practice. In this setting, she provided full-scope optometric care, ranging from comprehensive primary care to working alongside ophthalmologists providing advanced care in a range of specialties. She also founded the first OD/MD private practice optometric residency program in the State of New York affiliated with State University of New York (SUNY) College of Optometry.

In 2018, Dr. Calderon returned to academia and took on the administrative role of Chief of Primary Care at the University Eye Center at SUNY College of Optometry.

Over the course of her career, Dr. Calderon has been involved with organized optometry on the state and national levels. She is a Fellow of the AAO and a member of the AOA. She has served on the peer review board for *Optometry* - Journal of the AOA, has presented at national meetings, and has been a Clinical Examiner for the National Board of Examiners in Optometry.

Mark Colip, OD



Dr. Mark Colip currently serves as the President at Illinois College of Optometry (ICO). He received a BA in zoology from DePauw University, EMT-P from Methodist Hospital School of Paramedics, OD degree from ICO and residency education at Illinois Eye Institute in Chicago. Prior to being appointed President, he chaired both the Admissions and Awards Committees at ICO for 25 years while serving as Dean of Student Affairs and in two Vice Presidential roles.

He has held volunteer positions within the committee structures of both the AOA and ASCO. He has been a speaker at more than 125 colleges and universities in North America regarding the advantages of a career in optometry as well as reflecting upon his travels abroad in delivering eye care in South and Central America and Haiti.

Dr. Colip is a passionate advocate for quality higher education and has served on accreditation visits to ten Doctor of Optometry programs in the US as well as chairing an international accreditation visit to the first Doctor of Optometry program in Saudi Arabia.

Jennifer Coyle, OD, MS, FAAO



Jenny Coyle is the Dean of the Pacific University College of Optometry (PUCO). Dr. Coyle, a graduate of PUCO, completed a residency in contact lenses at that same institution and a Master's of Science in Clinical Optometry. She team-taught the contact lens didactic, laboratory and clinical curriculum for 14 years at PUCO. During that time, Dr. Coyle was also in a private group practice in Beaverton, Oregon specializing in contact lenses. She is a contributing editor for *Primary Care Optometry News*, a Fellow in the AAO and a Diplomate in the Section on Cornea and Contact Lenses. Dr. Coyle is also a Diplomate of the ABO, was named one of *Vision Monday's* 50 Most Influential Women in Optical in 2006, and received the 2010 Clarence G. Carkner Oregon Optometrist of the Year award. In 2018 she received a Theia Award of Excellence in Education from Women in Optometry. She lectures frequently at national and international meetings on cornea and contact lenses, and has authored many publications and book chapters on those topics.

Dr. Coyle is committed to the advancement of the profession of optometry, and served as the first woman President of ASCO for two terms (2013-2015) and for five years was the Chair of the Oregon Optometric Physicians Association Advocacy Committee. She currently serves on the Board of Directors of the AAO, chairs the ASCO Government Affairs Committee, and serves on the board of Women in Optometry. She is also a Past-Chair of the Association of Contact Lens Educators.

Jorge Cuadros, OD, PhD



Dr. Jorge Cuadros is the founder of EyePACS, a telemedicine program used for detecting diabetic retinopathy in more than 600 health care organizations providing over 125,000 retinal exams per year. He is coauthor and co-editor of two books, *Teleophthalmology* and *Digital Teleretinal Screening*. He has been the principal investigator for several clinical trials on several innovative technologies, such as automated retinal image analysis, laser imaging devices, and primary care programs for expanding access to diabetic eye care in underserved communities. He is currently Assistant Clinical Professor and Director of Informatics Research at the University of California in Berkeley, Optometric Eye Center.

David A. Damari, OD, FCOD, FAAO



Dr. David A. Damari is the Dean at Ferris State University Michigan College of Optometry (MCO). Prior to his appointment as Dean, he was a professor at Southern College of Optometry (SCO) and the Chair of the Department of Assessment, responsible for institutional review, measures of academic outcomes, and regional and professional accreditation. He is a Fellow and past President of the College of Optometrists in Vision Development and a Fellow of the AAO. He is the President of ASCO.

Dr. Damari is one of only three individuals to ever complete the Fellow-in-Residence program at the National Board of Examiners in Optometry (NBEO). He has served on several committees on the NBEO, including the Part I Re-engineering Committee, the Examination Restructuring Committee (2002-2003) that developed the current format of the entire examination, the Psychology/Perceptual Conditions sub-committee, the Patient Assessment & Management Authoring Committee, the Part II Exam Council, and the Applied Basic Science (Part I) Authoring Committee. He has taught courses in optometric theory and procedures, vision therapy, pediatric optometry, neurological eye disease, and strabismus and amblyopia at SCO and still lectures on the topics of assessment of student classroom performance, neurologic disease, vision therapy, visual disabilities, and the profession of optometry at MCO, nationally and internationally.

Dr. Damari is the consultant on visual disabilities to many national and state testing and licensing boards, including the National Board of Medical Examiners, the National Board of Osteopathic Medical Examiners, the CFA Institute, the Law School Admissions Council, and the Graduate Management Admission Council. He wrote chapters on visual disabilities in four books, including *Accommodations in Higher Education under the Americans with Disabilities Act*, edited by Michael Gordon and Shelby Keiser. He started a private optometric practice in Rochester, New York, helping hundreds of patients meet their visual performance needs in education, athletics, and the workplace. He was also an associate with Drs. Nathan Flax and A.M. Rappaport in Garden City, New York. He graduated from the State University of New York College of Optometry and completed the residency in Vision Therapy Rehabilitation there.

Scott A. Edmonds, OD, FAAO



Dr. Scott Edmonds is the Co-Director of the Low Vision and Contact Lens Service at Wills Eye Institute in Philadelphia, the Chief Medical Officer at March Vision Care in Los Angeles, California and the CEO of The Edmonds Group health care consulting firm. He is a clinical professor at Western University of Health Sciences- College of Optometry and a member of the adjunct faculty of the Pennsylvania College of Optometry at Salus University. He is member of the Allied Medical staff of the Lankenau Hospital, and chief of the vision and eye care unit at the Rothman Institute Concussion Network. He has written and lectured extensively on clinical and public health topics. He is currently the author of a featured blog on health care reform for *Primary Care Optometry News*.

A 1976 graduate of Indiana University of Pennsylvania and a 1980 graduate of the Pennsylvania College of Optometry, Dr. Edmonds is a past President of the Philadelphia Optometric Society, the Chester Delaware Optometric Society and the 1988 President of the Pennsylvania Optometric Association. On the national level, he has served as the Chairman of a number of committees for the AOA and has recently completed two terms on the American Council on Optometric Education.

Dr. Edmonds was honored by the Pennsylvania College of Optometry as the Preceptor of the Year in 1983. He was honored as the Optometrist of the Year in 1985 by the Philadelphia Optometric Society and again in 2008 by the Chester-Delaware Optometric Society. He was honored as the Pennsylvania Optometric Association Optometrist of the Year in 2008 and the 2016 winner of the Dr. Jerry P. Davidoff Memorial Award for Leadership Service.

John Flanagan, PhD, DSc, FCOptom, FAAO, FARVO



John G. Flanagan is the Dean and Professor at School of Optometry and Vision Science Program, University of California, Berkeley. Until May 2014 he was Professor at the School of Optometry and Vision Science, University of Waterloo and in the Department of Ophthalmology and Vision Sciences, University of Toronto. He was Director of the Glaucoma Research Unit, Toronto Western Research Institute and a Senior Scientist at the Toronto Western Hospital, University Health Network. He graduated in Optometry and Vision Sciences from Aston University, Birmingham, UK in 1980, where he later earned his PhD in 1985.

He has held continuous federal research funding for over 28 years (MRC/CIHR/CHRP/ORF) with additional research funding from the American Health Assistance Foundation, the Glaucoma Research Society of Canada and the Glaucoma Research Foundation. He has supervised 45 graduate students and has authored more than 170 peer-reviewed publications. In addition he has 10 book chapters, four books and has given numerous invited lectures to both professional and academic audiences around the world. His research interests include basic mechanisms of human glaucoma (glial cell activation, neuroprotection), ocular imaging, clinical psychophysics, 24-hour intraocular pressure, ocular blood flow and studies of vascular reactivity.

Awards include Certificate of Merit for Research Excellence, Glaucoma Research Society of Canada; Claire Bobier Lecture, University of Waterloo; Springer Lecture, University of Alabama; the Glenn A. Fry Award from the AAO; Outstanding Performance Award, University of Waterloo (2004 & 2013); Institute of Medical Science

Mel Silverman Mentorship Award, Faculty of Medicine, University of Toronto, 2011; and the Dario Lorenzetti Lecture, McGill Ophthalmology, 2013.

He was a plenary lecturer at the 2003 AAO meeting, and was appointed as faculty for the inaugural World Glaucoma Congress (WGC) in 2005 and each subsequent WGC meeting. He was a founding member of the Optometric Glaucoma Society; Program Chair from 2002 to 2007, and President from 2007 to 2012. He is also a member of the American Glaucoma Society, Association for Research in Vision and Ophthalmology (ARVO), International Society for Eye Research, AAO, Canadian Ophthalmological Society and Canadian Association of Optometrists. In 2008-2014 he was Chair of the Clinical Research Ethics Committee at the University of Waterloo. He has also served as a Governor and Senator at the University of Waterloo, and was a member of the Senate Executive Committee. In 2015 he was awarded a life fellowship of the British College of Optometrists. In 2016 he received a DSc *honoris causa* from his alma mater Aston University, and fellowship of the Association of Research and Vision of Ophthalmology.

Alan Glazier, OD, FAAO



Dr. Glazier is the founder and visionary behind ODs on Facebook and ODsOnFB.com, the eye care industry's largest and most highly engaged eye care organization online OR off, with more than 36,000 members as well as the founder of MyopiaInstitute.com, an award-winning eye care blog. He is the founder of Shady Grove Eye and Vision Care serving the Rockville, Maryland suburbs of Washington, DC. He is a partner and business development executive in Total Eye Care Partners, enabling optometrists with mature practices a medical model legacy exit.

Recent accomplishments are: 2011-2012 - voted one of the most influential optometrists in the US by the VisionMonday organization; 2015 - selected as one of the 50 most influential optometrists ever by his peers; 2016 - named "Visionary" by Vision Expo organization; 2016 - selected as one of 250 innovators in optometry by *Primary Care Optometry News* magazine; and 2017 - honored as Maryland Optometrist of the Year.

Dr. Glazier is the contributing editor to *Optometric Management* and *Optometry Times* magazines; inventor on seven issued patents in computer science and ophthalmology and is a sought-after lecturer on clinical topics, practice marketing and myopia control. He has authored *Searchial Marketing*, *Customer Communication Software* and numerous journal articles.

Dr. Glazier consults for Johnson & Johnson Vision Care, VTI Vision, PRN, Percept Corp, Hue AI, Essilor, EverydayContacts.com, Total ECP and GPN and serves on many boards inside and outside the eye care industry. He has been interviewed by CNN, NBC, CBS, Entrepreneur magazine, INC Magazine, Blog Talk Radio and Network Solutions.

Justin Griest, MEd

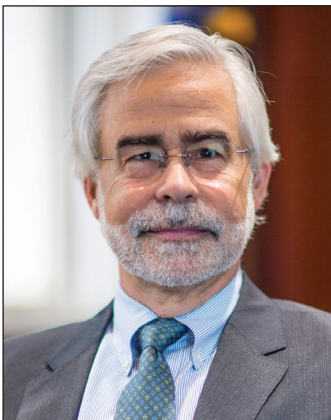


Justin Griest is the Admissions, Recruitment, and Financial Aid Officer at The Ohio State University (OSU) College of Optometry in Columbus, Ohio. In his role, Griest visits nearly 45 colleges and universities throughout the United States annually, meeting with pre-optometry students and pre-health advisors, and oversees the financial aid program for optometry students at OSU and the optometry admissions application process. Griest has worked in higher education and at OSU for 15 years.

Griest holds professional membership in the National Association of Medical Minority Educators where he served as the Central Region Program Chair for the 2014 conference, the ASCO Student Affairs Officers Committee where he served as the National Conference planning committee Co-Chair in 2013 & 2014, the National Association of Advisors for the Health Professions, and the National Association of Student Financial Aid Administrators. Griest has presented at the National Conference on Diversity, Race, and Learning, the National Association of Graduate Admissions Professionals, and the Central Association for the Advisors of the Health Professions.

Justin is a graduate of The OSU's Masters Program in Higher Education/Student Affairs where his culminating thesis addressed pipelines for underrepresented minority students towards careers in the health professions. He holds a Bachelors of Arts from Capital University in Radio/TV/Film and Communication where he received the University's Distinguished Senior Leadership Award.

David A. Heath, OD, EdM, FAAO



Dr. Heath has served as president of the State University of New York College of Optometry since 2007. He previously served as Vice President and Dean of Academic Affairs at the New England College of Optometry (NECO). Dr. Heath received his Doctor of Optometry and completed a residency at NECO and earned his Master in Education from Harvard University.

Dr. Heath is active nationally, serving as President of ASCO during the 2012-2013 and 2015-2016 academic years. He has served as a founding member on the Board of Directors of the ABO (2009-2015) and is active with both the AOA and the New York State Optometric Association.

Dr. Heath's work has focused on educational program development and international vision care. In 2010, he was awarded China's highest honor for foreigners, the "China Friendship Award" for his work there. Dr. Heath is also a two-time recipient of the Jack Bennett Innovation in Education Award from ASCO. Dr. Heath is a Fellow of the AAO and a Distinguished Scholar of the National Academies of Practice (Optometry).

Edward P. Hernandez, OD



Edward P. Hernandez, OD placed an indelible stamp on important policy that benefited Californians statewide. As a former State Legislator and current health care provider, he was immediately aware of the pressing issues impacting California communities.

There's no doubt, Dr. Hernandez made historic changes to the health care market in California. His legacy began with being the longest sitting chair of the Senate Health Committee, under term-limited restrictions. As chair, he played a key role in setting health policy for the state, including the implementation of groundbreaking Federal health care reform laws.

Among his signature legislative accomplishments, Dr. Hernandez had a total of 112 laws passed in his 12 years as a legislator, including successfully ushering in the Affordable Care Act, which includes all the consumer protections, Medi-Cal expansion, dramatically curbing coverage mandates to hold the line on health care costs, delivering a significant amount of funding for groundwater cleanup in the San Gabriel Valley, and championing funding for big transportation projects in his district. He successfully worked across party lines to negotiate a managed care organization tax that is delivering billions of dollars for various health care programs and the developmentally disabled community. His legislative record and accomplishments prove his willingness to stand up to and fight big monied interests, including Big Tobacco, Big Pharma, and the California Medical Association.

In addition, Dr. Hernandez served as a vocal member on numerous other committees during his tenure, including Business, Professions, and Economic Development, Governance and Finance, Insurance, Governmental Organization, and Ethics. He also chaired the San Gabriel Valley Legislative Caucus, a bipartisan group of 13 Senators and Assembly members representing the greater San Gabriel Valley.

Senator Hernandez grew up in La Puente, attended local schools and graduated from Bassett High School. He worked his way through school, attending both Rio Hondo and Mt. San Antonio community colleges before going on to get his BS degree in biology from Cal State Fullerton. He received a scholarship to study optometry at Indiana University, which is also where he met his wife, Diane. After returning home, Dr. Ed and his wife established their first practice in his hometown of La Puente.

Although he first ran for public office in 2006, Dr. Ed is no stranger to the State Capitol. While practicing as an optometrist he worked his way up the ranks of the California Optometric Association and served as President of the organization in 2000 and 2001, advocating in Sacramento on behalf of patients and members of the Association. Until his election to the Assembly, he had also served as President of the California Board of Optometry. In the Senate, Dr. Hernandez proudly represented the 24th Senate District, which included most of the San Gabriel Valley and parts of the City of Los Angeles, including East Los Angeles, El Sereno, Lincoln Heights, City Terrace, Montecito Heights that were later lost to redistricting. Through redistricting, the new 22nd Senate District encompasses most of the San Gabriel Valley, including the cities of Azusa, Baldwin Park, Covina, Duarte, El Monte, Industry, Irwindale, La Puente, Monterey Park, Rosemead, and West Covina. The district also includes the communities of Avocado Heights, Citrus, Hacienda Heights, Rowland Heights, South San Gabriel, Valinda and Vincent.

Elizabeth Hoppe, OD, MPH, DrPH



Dr. Elizabeth Hoppe is a proud alumna of Ferris State University College of Optometry, graduating with the class of 1988. After attaining her optometry degree, Dr. Hoppe continued her education with residency training in low vision rehabilitation. She earned a Master's Degree in Public Health from Yale University, and a Doctorate in Public Health from the University of Michigan.

Dr. Hoppe has enjoyed the opportunity to serve the profession of optometry in a variety of ways, including her role as an optometric educator at three different institutions, volunteering with the AOA, the California Optometric Association, and the American Public Health Association, conducting research, and providing patient care. She has published numerous papers, several book chapters, and continues conducting research in optometric education, neuro-optometric rehabilitation, and services for people with autism. Dr. Hoppe currently serves as the Dean of the College of

Optometry at Western University of Health Sciences and the President-elect of ASCO.

Danica J. Marrelli, OD, FAAO



Danica Marrelli received her Doctor of Optometry degree from the University of Houston College of Optometry (UHCO), and completed a residency in hospital-based optometry at the Baltimore VA Medical Center in Baltimore, MD.

She is currently a clinical professor at UHCO, where she serves as Assistant Dean of Clinical Education and staffs the glaucoma, retina, and general eye disease clinics. In the classroom, Dr. Marrelli teaches in the ocular pharmacology, glaucoma and case-based learning courses. Dr. Marrelli became a Diplomate in the ocular disease section of the AAO in November 2009 and is the secretary of the Optometric Glaucoma Society.

Patrick O'Neill, OD, FAAO



Dr. O'Neill is a 1982 graduate of Ferris State University, College of Optometry (now Michigan College of Optometry). He practiced as a solo, private practitioner until 1992, when he joined his practice with a large multidisciplinary medical group. In 2004 he formed the River Valley Eye Professionals.

Dr. O'Neill was the Medical Director for Eye Services for the Allina Medical Clinic. He is an adjunct faculty member at Southern College of Optometry and Indiana University College of Optometry where he directs and coordinates the off-site externship programs through his clinic, making sure the student externs have access and participation to full scope primary eyecare in both clinic and hospital settings.

Dr. O'Neill is a past-president of the Minnesota Optometric Association and the North Central States Optometric Council. He currently serves as chair of the Minnesota State Board of Optometry and is the secretary-treasurer of ARBO.

Howard B. Purcell, OD, FAAO



Howard Purcell, OD, FAAO, Diplomate and FNAP has been President and CEO of the New England College of Optometry (NECO) since July 2018. Before assuming his leadership role at NECO, he served as Senior Vice President at Essilor of America and Senior Director at Johnson and Johnson Vision Care. A second generation graduate of NECO, Dr. Purcell also participated in a group optometric practice for 11 years with his father in Miami Beach, FL.

Beginning in June 1991, Dr. Purcell joined the faculty of Nova Southeastern University College of Optometry. During his career at the college, he was a principle in the development of the Department of Cornea and Contact Lenses. Reaching the rank of Associate Professor, Dr. Purcell was responsible for both the didactic and clinical components of the program, serving as the Deputy Dean of the college.

Dr. Purcell is a Diplomate in the Cornea, Contact Lenses and Refractive Technologies Section of the American Academy of Optometry.

His energetic and enthusiastic style has made Dr. Purcell a popular lecturer internationally. Purcell's unique philosophies and practices have often attracted the media to focus attention on current optometric issues and research in the industry.

Lewis Reich, OD, PhD



A 1988 graduate of the University of California at Berkeley, Dr. Lewis Reich completed his residency in low vision rehabilitation at the Pennsylvania College of Optometry, where he later joined as a faculty member and researcher. In 1991, Dr. Reich entered the graduate program in physiological optics at the University of Houston and soon after was hired there as a Research Assistant Professor.

After receiving his PhD, Dr. Reich joined the faculty of Nova Southeastern University College of Optometry as Associate Professor. He was Assistant Dean for Student Affairs from 2003 to 2008. In 2008, Dr. Reich joined Southern College of Optometry as Professor and Vice President for Academic Affairs. After serving as Interim President for nine months, Dr. Reich was named President in January 2016.

Dr. Reich's research has been funded by the National Eye Institute as well as the National Institute on Disability and Rehabilitation Research. He has published peer-reviewed publications and has presented his research at dozens of national and international meetings. Dr. Reich is an active manuscript reviewer for major optometric and vision science journals and has served as a vision expert in legal cases.

He is a Fellow of the AAO and served on the Maintenance of Fellowship Committee and the Optometric Education Section's Diplomate Program Committee. He has served ASCO as the Chair of the Optometry Admissions Test Committee, Chair of the Chief Academic Officers, and was the inaugural Chair of the OptomCAS Committee, leading the profession in the implementation of a centralized application service. He now chairs the Applicant Development Task Force. Dr. Reich serves on the Executive Committee as Vice President of the Board of Directors for the National Board of Examiners in Optometry. Locally, he was elected Chair of the Memphis Medical District Collaborative.

James D. Sandefur, OD



James Sandefur graduated from the Southern College of Optometry (SCO) in 1965 and is a founder and charter member of the Gold Key Optometric Honor Society. Dr. Sandefur owned a private practice from 1968-2005 and has been an adjunct professor of optometry at SCO since 1980. He is also a Louisiana State Board of Optometry Examiners member, the Executive Director of the Optometry Association of Louisiana, and currently is serving as Chair of the Southern College of Optometry Board of Trustees.

A few of the honors he has received are: North Central States Optometric Council Virgil Deering Optometric Executive of the Year (2014); Optometrist of the Year -- Optometry Association of Louisiana (1992-1993, 2013-2014); Lifetime Achievement Award recipient from SCO (2001); first recipient of the Optometry Association of Louisiana Dr. James Sandefur Distinguished Service Award (2009); the AOA Distinguished Service Award (2010); and National Optometry Hall of Fame inductee (2017).

Earl L. Smith III, OD, PhD



Professor Smith received his OD (1972) and PhD (1978) from the University of Houston and subsequently joined the faculty of the University of Houston, College of Optometry (UHCO).

During his tenure at UHCO, he has served as the Chair of the Basic Sciences Department, the Associate Dean for Graduate Studies and Research, and as the Chief Health Officer of the University of Houston. Professor Smith currently holds the Greeman-Petty Professorship in Vision Development and is serving his second term as the Dean of the (UHCO).

Professor Smith's research interests are focused on the optics of the eye. For his research on the role of vision in regulating refractive development and eye growth, he received the Glenn Fry Award (1996) and the Prentice Medal (2010) from the AAO, the Korb Award for Excellence from the Contact Lens and Cornea Section of the AOA (2011), and was recognized as a Distinguished Scholar and Fellow by the National Academy of Practice in Optometry (2012). Professor Smith has published more than 190 refereed papers and received 36 years of research funding from the National Institute of Health's (NIH) National Eye Institute (NEI). He is also an accomplished lecturer, having received teaching awards at the department, college and university levels.

Professor Smith is an active member of the vision science community. He is a Fellow of the AAO, an Association of Research in Vision and Ophthalmology Fellow (inaugural class), a past President of the American Optometric Foundation (2002), a past President of ASCO (2010), a past member and chair of NIH NEI's Central Visual Processing Study Section (1998-2003), a past member of NIH's National Advisory Eye Council (2005-2008), and currently serves as a Director on the Boards of the National Alliance for Eye and Vision Research and the Alliance for Eye and Vision Research.

For his accomplishments in teaching and his impact on the profession of optometry, the Texas Optometric Association presented Professor Smith with the Educator of the Year (2003) and Optometrist of the Year (2009) awards and the AOA inducted him into National Optometry Hall of Fame (2015).

Carl H. Spear, OD, MBA, FAAO



Dr. Carl Spear completed his undergraduate education at Western Kentucky University and is a 1991 graduate of the University of Alabama School of Optometry at Birmingham. Additionally, Dr. Spear completed a Residency in Primary Care Optometry/Ocular Disease at Northeastern State University College of Optometry (NSUOCO), in Tahlequah Oklahoma and a Master's in Business Administration at Auburn University.

Dr. Spear was the founder and owner/operator of both Sight and Sun Eyeworks and Panhandle Vision Institute. He and his wife sold the seven locations, vertically integrated, practices in 2016.

While growing his own practices, Dr. Spear also worked in a variety of industry settings including: Senior Director, Professional Relations, Vision Group Holdings; Consulting Director, Professional Development and Program Implementation at Alcon; Assistant Professor of Optometry at NSUOCO where he taught courses in laser therapy, systemic medications, and advanced therapeutic and diagnostic clinical procedures; Southeast Region Director Growth and Development Vision Source; Director of Professional Relations, Novartis Ophthalmics; Director Education and Vendor Relations Consultant, Vision Source; and Center Director, Omega Health Systems.

Currently, Dr. Spear serves as Senior Vice President of Eyecare, Luxottica North America. In addition to lecturing, writing and consulting, Dr. Spear is also active in the following organizations: member, Board of Directors, AAO; Commander of the 403 ASTS Medical Squadron at Keesler AFB; member, AOA; member, Florida Optometric Association; member, *Think About Your Eyes*, Board of Directors; Chair, Florida Optometric Association Industry Relations; past member, Florida Board of Optometry; and past Chair, Florida Board of Optometry Probable Cause Panel.

Tammy Pifer Than, MS, OD, FAAO



Dr. Than received her Doctorate of Optometry from Southern College of Optometry in Memphis, TN. She then completed a residency in primary care with an emphasis in ocular disease in Tahlequah, OK. She also has a Master of Science degree in physical chemistry. Currently Dr. Than is a staff optometrist at the Carl Vinson VA Medical Center in Dublin, Georgia. Prior to this she was a professor at the University of Alabama at Birmingham School of Optometry. She publishes in several of the optometric journals and lectures nationally on various subjects including therapeutics, ocular disease and ophthalmic lasers. Dr. Than is a fellow of the AAO. Dr. Than received the AOA Educator of the Year award in 2015. She is a past recipient of the UAB President's Teaching Award and has received numerous teaching awards.

Christina S. Wilmer, OD, FAAO



Chris Wilmer completed her Doctor of Optometry at the UC Berkeley and completed a primary care residency at the San Francisco VA Medical Center. She joined the faculty at UC Berkeley Optometry shortly after completing her residency. Early on in her UC Berkeley faculty tenure she was appointed the Director of Residency Programs and currently is the Director of Affiliate Residency Programs. She holds the faculty title of Health Sciences Clinical Professor and is the Associate Dean for Clinical Affairs and Clinic Director. In addition to her administrative responsibilities, Dr. Wilmer has prioritized clinical patient care and clinical teaching.

Dr. Wilmer is a member of the National Board of Examiners in Optometry Part I Applied Basic Science committee and council. She has served as the Chair of the Clinic Directors Special Interest Group (SIG) and as a member of the Culture Task Force and Residency Affairs Committee for ASCO. She serves her local medical community as a longtime member of the Alta Bates Medical Center's Ethics Committee, supporting patients, families and providers in difficult medical and end of life decision making.

Dr. Wilmer has served the AAO as the Chair of the Anterior Segment Section, Program Chair of the Primary Care Section and Vice Chair of the Anterior Segment SIG. She is currently the Diplomate Written Exam Chair for the Anterior Segment Section. Dr. Wilmer lectures locally, regionally and nationally on a number of clinical topics.

Susy Yu, OD, MBA, FAAO



Dr. Susy Yu is the Director of Business Strategy and Operations Support for Vision Essentials by Kaiser Permanente in Southern California. Dr. Yu's main role is to develop and implement strategy for this division comprising more than 300 Doctors of Optometry, more than 700 ancillary staff, 46 offices, which cares for more than 700,000 patients annually. One of the more interesting aspects of Dr. Yu's role is to identify and pilot new technologies and help determine the ideal practice model for optometry in the complex and rapidly evolving healthcare environment.

Dr. Yu served on the California State Board of Optometry from 2003 to 2011. Her board experience, together with her role at Kaiser Permanente, shifted Dr. Yu's focus from individual patient care to population care management — developing policies and making strategic decisions to improve health outcomes for a community of people.

Dr. Yu was elected to the ARBO Board of Directors in 2009, and served as President from 2015-2016. Dr. Yu led ARBO's efforts to improve continuing education by connecting it to quantifiable measurements in knowledge, performance and patient outcomes. As chair of COPE, Dr. Yu was instrumental in the program's recognition as substantially equivalent to the Accreditation Council for Continuing Medical Education and in COPE's acceptance into the Joint Accreditation for Interprofessional Continuing Education, together with medicine, nursing, pharmacy and physician assistants.

Dr. Yu earned her Bachelor of Arts from UC Berkeley in 1992, a Doctor of Optometry degree from the UC Berkeley School of Optometry in 1996. She earned a masters in business administration from the Anderson School at UCLA in 2002. She received her Fellowship in the AAO in 1999 and was recognized as one of *Vision Monday's* Optometric Business Innovators in 2012. She was recently appointed to the Board of Directors of the NBEO.

Karla Zadnik, OD, PhD



Dr. Karla Zadnik is the Dean of The Ohio State University College of Optometry where she is also the Glenn A. Fry Professor of Optometry and Physiological Optics. She is an Ohio State Distinguished Scholar, serves as the Executive Dean for the Health Sciences, and has chaired the Biomedical Sciences Institutional Review Board at Ohio State for the last 15 years.

She is the immediate past president of ASCO and is a member of the National Board of Examiners in Optometry's Board of Directors.

Dr. Zadnik received her OD and PhD degrees from the University of California, Berkeley School of Optometry. Professor Zadnik is a Fellow of the AAO, is a Diplomate in its Section on Cornea, Contact Lenses & Refractive Technologies, and served as the Academy's President in 2011-12. Dr. Zadnik was the Study Chairman for the NEI-funded Collaborative Longitudinal Evaluation of Ethnicity and Refractive Error (CLEERE) Study for 20 years and chaired the first-ever NEI-funded multicenter study based in optometry, the Collaborative Longitudinal Evaluation of Keratoconus (CLEK) Study.





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