

AMERICAN ACADEMY
OF OPHTHALMOLOGY®

Protecting Sight. Empowering Lives.®

2018 YEAR IN REVIEW

Supporting Your Commitment to Protecting Sight





The American Academy of Ophthalmology is honored to support our profession's commitment to enriching the lives of patients with the gift of sight. We provide innovative resources to advance patient care, cutting-edge practice-management solutions, and unparalleled opportunities to learn and network with the brightest minds in ophthalmology.

Academy membership presents the opportunity to serve the underserved, give back to the community and advocate for our patients' best interests in state and federal affairs, ensuring that all beings have access to the highest-quality care.

In the pages that follow, discover what we, the Academy's community of 32,000 member ophthalmologists, achieved together in 2018. From establishing a permanent research fund for the advancement of pediatric ophthalmology to launching an initiative for a new Museum of Vision®, Academy members and patients are supported on all fronts. We are truly empowering lives.

PHOTO: Diagnosed with a rare genetic condition called Leber congenital amaurosis, Creed Pettit had been slowly going blind since birth and was unable to see except in bright light. During an experimental treatment, Audina M. Berrocal, MD, a pediatric retinal surgeon at the Bascom Palmer Eye Institute in Miami, delivered healthy genes to Creed's eyes. Within a month after gene therapy, he was able to see details of the world he'd never seen. Read more about our patient stories on page 20.

PHOTOS, THIS PAGE AND COVER: University of Miami

A Letter From the Academy CEO

Dear colleagues and friends of the Academy,

April 2019 marks the conclusion of my 10th year as our Academy's CEO. It's a position I'm very honored to hold and carries with it a humbling set of responsibilities to our profession and to our society. Although I cared for a patient last in 2009, I spent the prior 26 years as an ophthalmologist in active practice. When people ask me what I do, I don't say, "I'm the Academy's CEO." I respond, "I'm an ophthalmologist." That is my core identity and represents the central perspective from which I view the issues and forces that impact our professional world.

Much has changed in medicine during the past decade. Some of it has been very disruptive to clinical practice and to the patient-physician relationship. The Affordable Care Act (Obamacare) was signed into law in March 2010, representing the most impactful overhaul of the U.S. healthcare system since Medicare 45 years earlier. Nine years later, we

are still slogging our way through thousands of pages of enabling regulations and changes to those regulations. The fundamental "volume to value" payment shift impacts us all.

We are also "living the dream" as medicine adapts to its digitalization. In 2009, fewer than 30 percent of ophthalmologists used an electronic health record (EHR) system; now it is over 70 percent. Most dislike it. Many of us long for the days of paper charts when physicians didn't face the screen instead of the patient or didn't employ scribes to handle the data entry. But they are here to stay. The 20 percent of the U.S. economy that is health care was the last major segment to become digitized.

Many of the changes are positive ones. These same EHRs can make it possible to access patient records from our laptops, home computers and secondary offices; view lab work and imaging studies; and order medications. They can lessen the chance for medication errors and provide useful practice management data.

Science is providing us with new tools, which, when fully mature, have the promise of revolutionizing care. Consider that in the last decade the cost to sequence the human genome has gone from about \$10 million to about \$1,000! And that biomarkers are ushering a true era of precision medicine in the management of tumors, inherited diseases and other disorders.

The American Academy of Ophthalmology and its mission have remained central to the future of our wonderful profession. It is the Academy's responsibility to develop tools and resources for ophthalmologists in training and ophthalmologists in practice to sift through information that now doubles in less than two years and to stay at the cutting edge of knowledge and skills. These too have largely (but not completely) moved from paper to digital content.

And the Academy has also focused intently on representing the profession to the public and to policymakers. Its websites now



attract about 8 million visitors each year. It projects the value of ophthalmology and of eye care through print, video, media partners, podcasts and social media. And a key part of that is compiling the evidence to support the valuation of the work we do as ophthalmologists. More and more of that derives from mining the data trove within the IRIS® Registry (Intelligent Research in Sight) (see page 7).

In the pages that follow, you will learn more about many Academy programs about which you may be totally unaware. If there are two things that I underestimated when I accepted this role 10 years ago, they were (1) the fantastic breadth of Academy responsibilities and activities — many of which are under the radar screen of the typical

member, and (2) the degree to which the Academy depends upon the spirit and work of member volunteers to fulfill its responsibilities. When the Academy takes on a new initiative, advocates for legislation or regulation or addresses a policy stand, these actions are based on advice, expertise and/or leadership by hundreds of our colleagues (see page 13).

They not only contribute to the Academy's strength and resiliency, but sustain a professional culture of respect, collegiality, community and innovation. This helps us stay true to our mission.

We are the Academy, and I am privileged to serve our profession among you.

David W. Parke II, MD
Chief Executive Officer

A Letter From the 2018 Academy President

Dear colleagues,

We, the members of the American Academy of Ophthalmology, had a remarkable year in 2018. I am immensely proud of the year's achievements and the magnitude of work and dedication that went into them. I trust that this Year in Review will make you proud, too.

Our flagship educational products gained new enhancements, thanks to the vision and work of Senior Secretary for Clinical Education Lou Cantor, MD, Vice President of Education Dale Fajardo and a staff of 34, along with more than 600 physician volunteers. The **Ophthalmic News and Education (ONE®) Network** grew by 20 percent in 2018, including more than 300 new articles, 300 new videos and interviews, 25 new and revised CME activities, and a new weekly 1-Minute Video series. We also increased the ONE Network's global access:

Now more than ever, ophthalmic professionals everywhere can access critical tools and resources simply by picking up a mobile device. And we expanded the Academy's franchise of journals to three with the launch of *Ophthalmology® Glaucoma*, delivering original articles on this important subspecialty.

The largest and most successful clinical data registry in the world, the **IRIS® Registry** has become an essential resource for ophthalmic professionals. Under the leadership of Medical Director of Health Policy Bill Rich, MD, Vice President of Quality and Data Science Flora Lum, MD, her staff, and numerous physician volunteers, ophthalmic practices are embracing and benefiting from this invaluable resource. Last year, 99 percent of Academy members who used it for MIPS reporting earned exceptional performance bonuses, and 100 percent avoided financial penalties. Of course, this financial value pales in comparison

to improvements in patient care. As a clinical reference, the IRIS Registry is unrivaled. A \$2 million gift from the Knights Templar Eye Foundation will deepen its pediatric database, establishing a permanent research fund for pediatric ophthalmology (see page 8).

AAO 2018 welcomed physicians and health professionals from around the world to Chicago, where they were inspired by some 3,800 course instructors, moderators, panelists, authors and presenters — who themselves represented 70 countries. A talented crew of volunteers made our annual meeting a success: More than 100 physician volunteers supported the AAO 2018 program and 25 volunteers supported the AAOE 2018 program in collaboration with Secretary for Annual Meeting Maria Aaron, MD, and Vice President of Meetings and Exhibits Debra Rosencrance (see page 9).



Annual meeting attendees included the inaugural class of the **Minority Ophthalmology Mentoring** program, which seeks to attract underrepresented minorities to a career in ophthalmology. These 22 medical students left AAO 2018 expressing “high interest” in ophthalmology. Congratulations to Secretary for Member Services Brad Feldman, MD, Secretary for Global Alliances Rich Abbott, MD, and Vice President of Membership and Alliances Jane Aguirre — and a special thanks to the organizations sponsoring this program (see page 12).

I am immensely proud of the year's achievements and the magnitude of work and dedication that went into them.



The **American Academy of Ophthalmic Executives** continues to create indispensable business resources for our members, led by Senior Secretary for Ophthalmic Practice Robert Wiggins, MD, Ms. Rosencrance and their team. This year, AAOE introduced important new coding tools, including the Coding Audit Success Toolkit, and launched the Ophthalmology Business Summit “boot camp” addressing the complex challenges faced by today’s ophthalmic practices (see page 19).

In 2018, our **communications and marketing** team of 29 staff and 22 physician volunteers, led by Secretary for Communications Dianna L. Seldomridge, MD, and Vice President for Communications and Marketing Renaldo Juanso, kept you informed

of the latest news, products and services, and taught the public about the value of medical and surgical eye care. They set industry benchmarks for excellence in communications, capturing national awards for the public awareness campaign to increase eye safety during a solar eclipse and the animated video feature, “Eight Steps to Protect Your Sight From Contact Lens Infections” (see page 20).

Finally, this was a landmark year for **advocacy**. The Academy’s governmental affairs team — Senior

Secretary for Advocacy Daniel J. Briceland, MD, Vice President of Governmental Affairs Cathy Cohen and their 17 staff and 84 physician volunteers — achieved big wins during the year: They helped enable your success in the MIPS program, lobbied Congress to shield your Part B drug reimbursements from penalties and partnered with several state societies to defeat legislative proposals that would have put patients at risk (see pages 13-14).

The landscape of medicine will continue to change, but the dedication of the Academy’s 32,000 members will keep ophthalmology strong. This look back at 2018 shows our powerful commitment to education, advocacy, the best clinical and business resources, and most of all, our patients. We’ll continue to build on these achievements to advance our great profession and enrich the lives of countless patients.

Thank you for allowing me to serve as your president in 2018. It has been a true privilege.

Sincerely,

Keith D. Carter, MD
2018 President

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Using Data to Advance Patient Care and Enable Physician Success

THE [IRIS® Registry \(Intelligent Research in Sight\)](#), the nation's first comprehensive eye disease clinical registry, provides indispensable insights and scientific advancements. It elevates the profession as a source for research and a wealth of data, leading to improved quality of care and successful Medicare physician payment system reporting. The IRIS Registry culls data from nearly 53 million patients, 223 million patient records and more than 18,000 physicians contracted from over 5,100 practices. As the largest clinical data registry within medicine, the Centers for Medicare and Medicaid Services (CMS) points to the Academy's registry for other specialties to emulate.

Exclusively accessible to U.S. Academy member ophthalmologists and physicians in training, the IRIS Registry is a proven analytic database. Insights gleaned from

statistical analysis have generated [12 scientific studies](#). These studies cover topics ranging from strabismus surgery reoperation rates in the U.S. to the real-world effects of intravitreal anti-VEGF drugs on IOP. The most recent study on [racial and gender disparities in newer glaucoma treatments](#) was led by Mildred M.G. Olivier, MD, and assesses demographic differences in the use, safety and effectiveness of minimally invasive glaucoma surgery compared to other treatments.

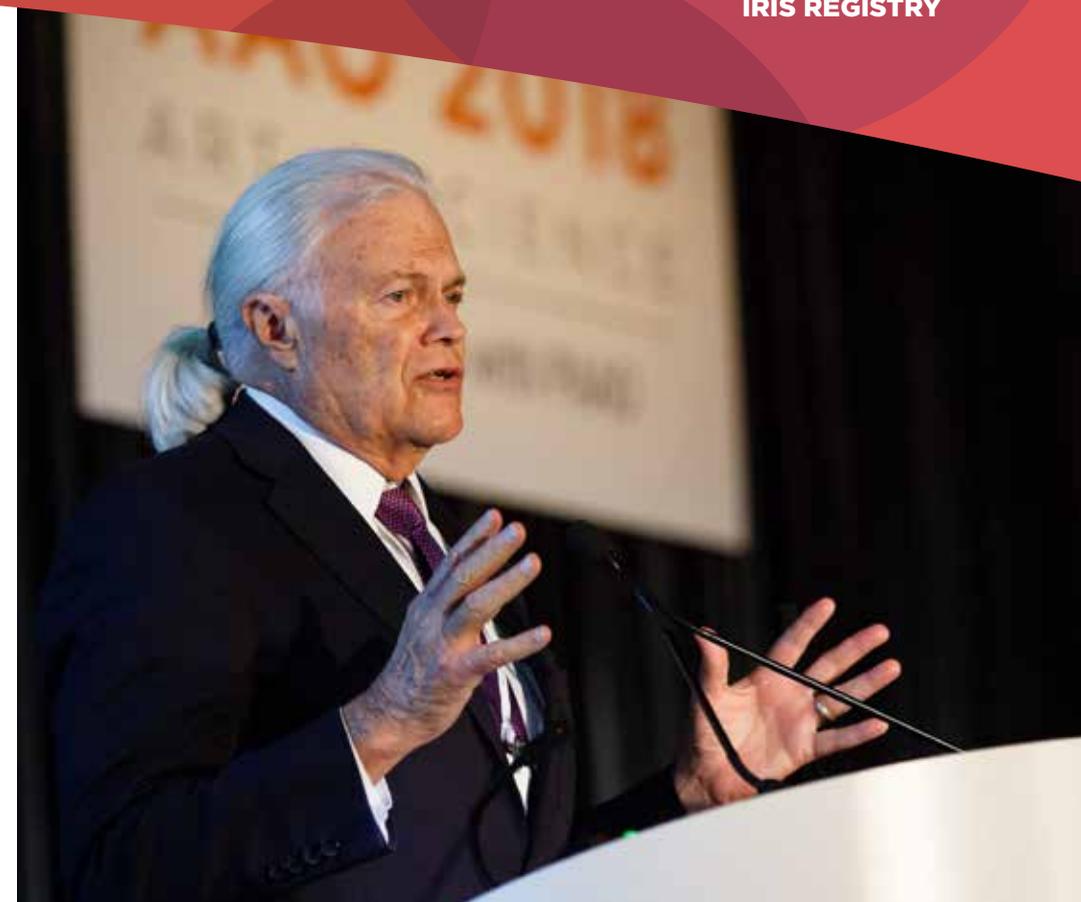
MIPS REPORTING: OPHTHALMOLOGISTS SAVE \$186 MILLION

Merit-Based Incentive Payment System (MIPS) scores highlight the exceptional value of the IRIS Registry. For instance, 99 percent of Academy members using it for 2017 MIPS reporting earned remarkable performance bonuses. By comparison, only 71 percent of physicians across all of medicine earned the same bonus.

By reporting through the IRIS Registry, **all participants avoided financial penalties for 2017 MIPS**. This relief from penalties will save ophthalmologists an estimated total of \$186 million — or \$23,250 each — and underscores the IRIS Registry's unequivocal impact on quality reporting nationwide.

\$2 MILLION GRANT ADVANCES REAL-WORLD PEDIATRIC DISEASE RESEARCH

A \$2 million gift from the **Knights Templar Eye Foundation** was paramount to establishing a permanent research fund for the advancement of pediatric ophthalmology so that physicians can use IRIS Registry data to serve the needs of children as well as adults. The gift will support researchers investigating both rare and common eye diseases affecting children and will facilitate the discovery of optimal, real-world approaches to disease prevention and treatment.



\$3.9 MILLION IN PENALTIES AVOIDED AT THE ACADEMY RESOURCE CENTER

At the AAO 2018 Academy Resource Center, the Academy's [IRIS Registry](#) team helped meeting attendees with 2018 MIPS reporting. As a result, 90 individual physicians and 37 practices reporting as groups (representing 107 ophthalmologists) saved approximately \$3.9 million in avoided penalties.

PHOTO: Academy Past President and IRIS Registry committee chair William L. Rich III, MD, FACS, presented during the AAO 2018 symposium, "The Value of the IRIS Registry: What Can We Learn From 250 Million Patient Records?" Dr. Rich and a distinguished panel of Academy leaders discussed how the Academy's IRIS Registry enables the study of practice patterns, clinical outcomes and possible risk factors for disease development.

Enhancing Clinical Education With Cutting-Edge, Interactive Resources

NEW ENHANCEMENTS to the Academy's clinical offerings keep our flagship educational products up to date and ensure that you're equipped with critical tools to stay competitive.

ENRICHING THE ONE NETWORK THROUGH INNOVATIVE CONTENT

Driven by strategic content updates developed through endowments, use of the Academy's online trove of clinical and surgical media, the [Ophthalmic News and Education \(ONE®\) Network](#), grew by 20 percent in 2018. Instead of solely operating as a members-only benefit, more features of the ONE Network are now open to the global ophthalmology community. This greater access to content, including news and surgical videos, allows the Academy to educate on a larger scale, fostering an increase in the efficacy of patient care.

Features added to the ONE Network in 2018 include:

- More than 25 new and revised [CME activities](#), including courses, cases and learning plans, and weekly "Diagnose This" questions
- 60 clinical and surgical [1-Minute Videos](#)
- More than 300 [new videos and lectures](#), including highlights from the Academy's annual meeting and the 2018 annual meetings of the American Glaucoma Society (AGS) and American Society of Retina Specialists
- More than 300 [news articles](#), including headlines and Editors' Choice reviews

The ONE Network also features the [Knights Templar Eye Foundation Pediatric Ophthalmology Education Center](#) and the [David E. I. Pyott Glaucoma Education Center](#). These two virtual skills-transfer centers provide ophthalmologists around the world with access to high-quality, subspecialty-specific clinical

education, all of which is vetted by subject-matter experts.

2018 additions to these centers include:

- New [Retinoscopy Simulator](#)
- New [Complex Strabismus Simulator](#)
- Interactive visualizations of [2017 Glaucoma Outcomes From the IRIS Registry](#)
- Access to 60 recorded [presentations from the 2018 AGS annual meeting](#)
- Nearly 100 presentations and lectures from the Academy's [Pediatric Ophthalmology](#) and [Glaucoma](#) Subspecialty Day meetings
- Five new [articles on pediatric diseases](#)

With increased access to ophthalmic education, physicians are better equipped to manage existing conditions, take preventive measures and educate their communities.



EXPANDING CLINICAL RESEARCH IN GLAUCOMA

The latest addition to the Academy's growing franchise of journals, *Ophthalmology*® *Glaucoma* presents articles on new approaches to diagnosis, pharmacological therapy innovations, surgical techniques and basic science advances that impact clinical practice.

PHOTO: The ONE Network's new 1-Minute Video series features a new video on a specific pearl or concept every week, including "How to Manage Persistent DME," "When to Use Steroids for Corneal Ulcers" and "Anterior Vitrectomy Using a Pars Plana Approach."

Enriching AAO 2018 Attendees With New Tools and Techniques

MORE THAN 15,000 physicians and health professionals from around the world convened at [AAO 2018 in Chicago](#) to network with colleagues and peers, gain clinical pearls from 2,000+ presenters and experience the latest technology from over 500 exhibiting companies.

CAPTIVATING AUDIENCES AND DELIVERING PEARLS

Jackson Memorial Lecture

Philip J. Rosenfeld, MD, PhD, provided an in-depth history behind the use of bevacizumab for treatment of AMD in “Lessons Learned From Avastin and OCT: The Great, The Good, The Bad and The Ugly,” during the 75th Jackson Memorial Lecture — the most prestigious lecture in ophthalmology. Dr. Rosenfeld described how Avastin, an oncology drug used to treat colon, kidney and other cancers, became a

leading treatment for AMD. Though the drug’s journey to acceptance was fraught with challenges, Dr. Rosenfeld was the first to recognize Avastin’s ophthalmic potential and led the drive to make it available as a safe, effective and low-cost option for treating AMD.

AAO 2018 Scientific Program by the Numbers:

- **247 instruction courses**
- **91 AAOE practice management instruction courses**
- **60 Skills Transfer labs**
- **78 Breakfast With the Experts roundtables**
- **54 symposia**
- **8 Academy Café sessions**
- **3 Spotlight sessions**
- **38 Learning Lounge sessions**
- **102 original papers**
- **567 scientific posters**
- **54 surgical videos**

Michael F. Marmor Lecture

Howard Schatz, MD, a renowned professional photographer and former ophthalmologist, delivered the Michael F. Marmor Lecture in Arts and Ophthalmology, which brings cultural experiences and new ideas into focus. Expertly observing the AAO 2018 theme, Art + Science, during “Photography: In Search of Wonder,” Dr. Schatz discussed how he was drawn to photograph the body and how he works with his subjects to surprise himself and the viewer. To see Dr. Schatz’s photographs, visit his [website](#).

PROVIDING FREE ONLINE ACCESS TO THE ANNUAL MEETING

The Virtual Meeting is a free online component of AAO 2018. Approximately 20 hours of educational content were streamed live over five days, then archived until Feb. 5, 2019. More than 2,529 people from 122 countries were able to virtually attend the meeting. By providing this service, the global ophthalmic community advanced



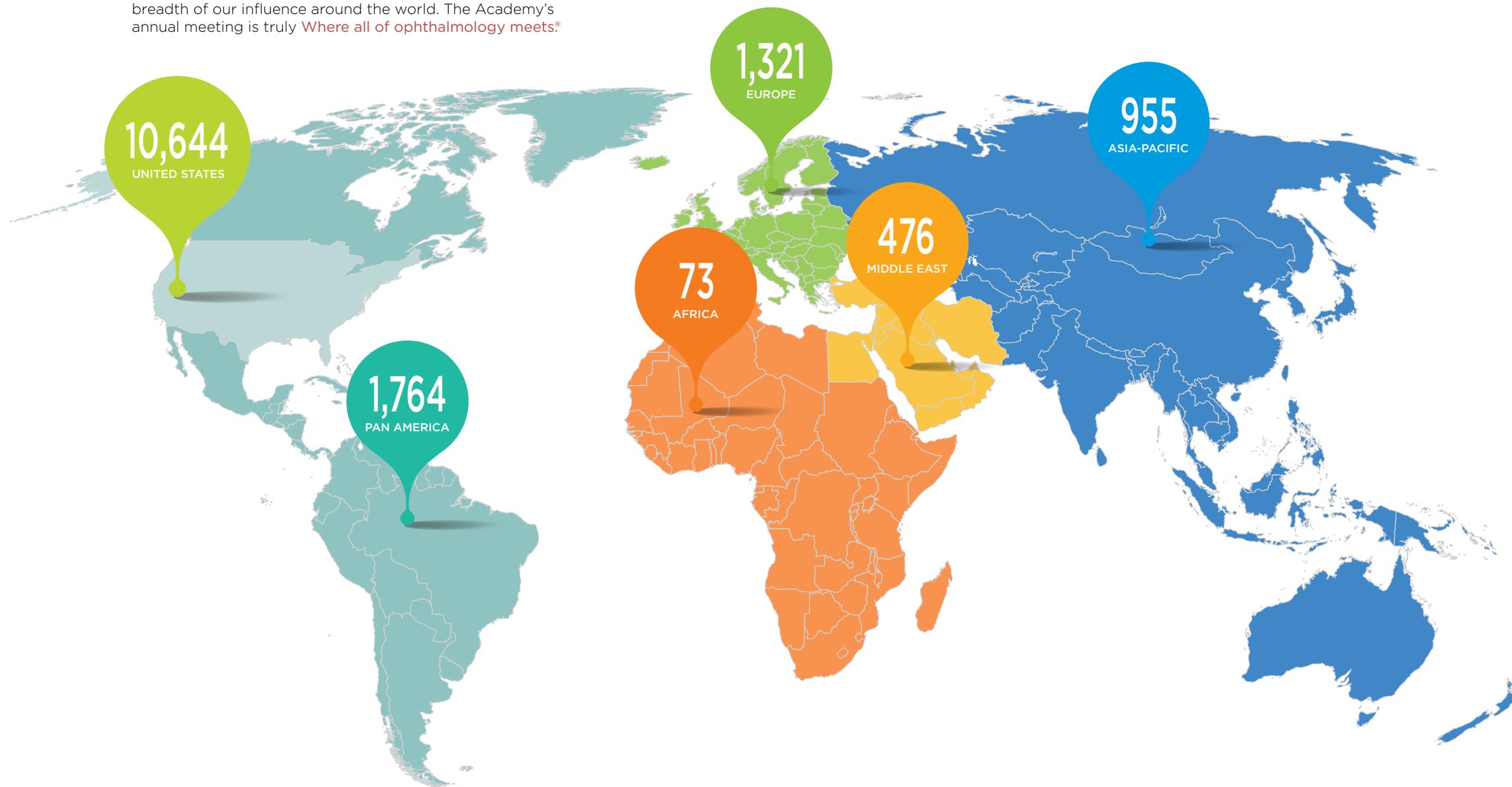
their skills with pearls from AAO 2018. Anyone who was unable to attend the annual meeting in person was still able to learn from industry leaders and be a part of the shared experience.

PHOTO: Philip J. Rosenfeld, MD, PhD, shared pearls on age-related macular degeneration clinical trials during the [Jackson Memorial Lecture](#) at AAO 2018 in Chicago.

AAO 2018 ATTENDANCE

Uniting the Ophthalmic Community

15,233 ophthalmologists and health professionals from 132 countries converged in Chicago for AAO 2018, reinforcing the breadth of our influence around the world. The Academy's annual meeting is truly *Where all of ophthalmology meets.*



Providing Resources to Physicians From Around the World

THROUGH GLOBAL outreach programs, the Academy provides support for ophthalmology residents in developing nations with limited educational resources. By connecting physicians to global training opportunities and providing access to innovative tools and resources, we're investing in a much brighter future for these individuals and the profession.

Notable achievements in 2018 include:

- Granted ONE Network access to 46,922 ophthalmologists in 64 developing countries.
- Distributed more than 400 tote bags full of Academy books and DVDs to AAO 2018 attendees from developing countries.

- Increased use of the [Global Ophthalmology \(GO\) Guide](#), a valuable resource for planning international ophthalmology projects and regional management of specific diseases and conditions. The guide also includes the Global Directory of Training Opportunities, a listing of fellowships and observerships for members in training.
- Provided 275 full sets of the 13-volume BCSC® (*Basic and Clinical Science Course*™) through the Education Distribution Project — 165 sets were sent in partnership with the International Council of Ophthalmology.

SUPPORTING OPHTHALMOLOGISTS FROM DEVELOPING NATIONS

The [Rotary Club Host Project](#) is a collaborative effort between the Academy and individual Rotary Clubs to provide educational opportunities to ophthalmologists from developing nations. Carefully selected ophthalmologists are brought to the United States for

two weeks. The program begins in the community of the sponsoring Rotary Club and concludes at the Academy's annual meeting.

Since the Rotary Club Host Project's start in 2000, we have:

- Hosted 132 guests (10 this year)
- Provided educational opportunities to ophthalmologists from 61 countries (four new countries in 2018 — Gabon, Micronesia, Niger and Mozambique)
- Partnered with 34 Rotary Clubs

The program's impact outlasts the participants' visit to the U.S. Not only do they continue to share information and skills with their colleagues at home, they also nurture the professional and personal relationships they established during their stay.



PHOTO: Through the Rotary Club Host Project, selected ophthalmologists from developing nations visit the United States for two weeks, ending their stay at the Academy's annual meeting. Participants posed for a photo in the exhibit hall during AAO 2018.

Diversifying the Profession and Strengthening Patient Relations

THE GOAL of the [Minority Ophthalmology Mentoring program](#), a partnership between the American Academy of Ophthalmology and Association of University Professors of Ophthalmology (AUPO), is to encourage underrepresented minorities — African Americans, Hispanics and Native Americans — to pursue a career in ophthalmology. Doctor-patient interactions are often improved when the individuals share common backgrounds. However, African-American, Hispanic and Native American ophthalmologists are underrepresented when compared to the U.S. population. Through mentoring, underrepresented minority residents in training programs can help bridge the cultural gap.

Minority residents enrich the education of those training with them and provide perspective to improve cultural understanding and empathy. Minority physicians are also more likely to practice in low-resource areas, enabling underserved communities to access eye care.

BUILDING A FUTURE FOR MINORITY OPHTHALMOLOGISTS

Program faculty serve as champions for the students and the training programs by assisting with outreach to medical students, department shadowing, research guidance and more. All second-year medical students receive access to a seven-month, web-based USMLE Step 1 exam preparation program. The program, supported by a five-year funding commitment from the Academy and the Association of University Professors of Ophthalmology, provides resources

to both first- and second-year medical students, including books and question banks.

The program's inaugural class of 22 medical students attended AAO 2018 in Chicago, where they spent the weekend learning about the wide variety of professional pathways for ophthalmologists. By the time the program ended, student evaluations indicated that 100 percent had "high interest" in ophthalmology, compared with 23 percent prior to attending the program.

Watch the video, "[Changing the Face of Ophthalmology](#)," to hear from the students and physician leaders firsthand.



PHOTO: Michelle Colbert, a Johns Hopkins School of Medicine student and Minority Ophthalmology Mentoring Program participant, explored cutting-edge devices in the exhibit hall during Student Engagement Weekend at AAO 2018.

Fighting for Laws and Policies That Help You Serve Your Patients and the Profession

THE ACADEMY IS a leader in Washington, D.C., and states nationwide in the push to advance laws and policies that support the profession of ophthalmology. Efforts undertaken by the Academy's community of U.S. ophthalmologists ensure that high-quality medical and surgical eye care is available and sustainable in every community.

PREVENTING POTENTIALLY DEVASTATING CHANGES TO E/M REIMBURSEMENTS

In a major win for the Academy on behalf of all ophthalmologists, the Centers for Medicare and Medicaid Services (CMS) is making changes to how evaluation and management (E/M) is reimbursed.

The Academy worked tirelessly to nudge CMS away from a proposal that would have significantly reduced E/M payments in 2019 along with payments for procedures that ophthalmologists provide on the same day as an office visit.

After working within a broad coalition, the Academy successfully convinced CMS to instead adopt commonsense changes to E/M documentation requirements. Those that most affect ophthalmology include eliminating duplicative chief complaint and history information that has already been entered by clinical staff or the patient.

Additionally, there will be no E/M code collapse until 2021. This is CMS' tacit acknowledgment that it should take more time to adjust this administrative change.

By securing these changes to CMS policy, the Academy helped deliver a significant improvement over the proposed system by educating the Trump administration and key members of Congress on the impact the proposal would have on patient care. These changes also help avoid a possible two-percent pay cut to our profession's subspecialties.

LEADING THE PUSH FOR ACCESSIBLE DRUGS

Over the past year, the Academy has taken bold, proactive steps to develop and support policies that shield our patients from sudden cost spikes. We're similarly active in sounding the alarm about worrisome nationwide shortages for ophthalmic drugs, including fluorescein strips. In direct response to our efforts, the Food and Drug Administration convened a drug-shortage task force to address this and other scarcities.

The Academy also strives to sway the Trump administration from what we believe is a legally dubious plan to allow step therapy in Medicare. This policy took effect on Jan. 1, 2019, enabling Medicare Advantage plans to introduce fail-first therapy for its beneficiaries. The Academy and other organizations throughout medicine continue to believe there are two prevailing reasons why CMS' step therapy policy may run afoul with statute. First, CMS does

not have the authority to grant Medicare Advantage plans the ability to limit coverage for Part B drugs. Second, we believe that the plan interferes with beneficiaries' access to the same services provided under original Medicare, which is inappropriate.

PHOTO: 2018 Academy President-Elect George A. Williams, MD, testified before the U.S. House of Representatives Energy and Commerce Committee Subcommittee on Health about the need for timely access to compounded treatments.



The Academy, along with a new step-therapy coalition including rheumatology, the American Society of Retina Specialists and the American Society of Cataract and Refractive Surgery, revealed to CMS the findings of an [independent legal review](#) that indicates that the agency and its Medicare Advantage program are at risk of litigation.

PUSHING BACK AGAINST PRIOR-AUTHORIZATION ABUSES

The Academy is seeking the immediate end of prior-authorization abuses that delay critical care for our patients with Medicare Advantage coverage. To do so, we've built a strong coalition that spans medical specialty societies and patient advocates. With this strength in numbers, we're meeting regularly with Medicare's top officials to educate them on the profound effect on patients who receive regular injections to preserve vision, as well as infusion treatments for crippling conditions.

SECURING FEDERAL FUNDING FOR IMPORTANT RESEARCH AND ACCESS-TO-CARE PROGRAMS

Although the private sector and universities can help promote some advances in our profession, it's the federal government's capacity for funding independent investigations that must be cultivated and shepherded through each year's budget cycle.

As a result of ongoing Academy advocacy, the National Eye Institute received an additional \$24.2 million in 2018 over the previous year to help advance important vision research. Congress and President Trump also increased the Department of Defense's vision research program by \$5 million. The National Institutes of Health gained an extra \$2 billion as well, some of which will support vision-related programs, including investigations into traumatic brain injuries.

The Academy also facilitated the Indian Health Service's improvements to its technology for expanded access to diabetic retinopathy screenings. Following months of intensive lobbying, Congress authorized \$1 million to upgrade the agency's retinal cameras. The program — known as the Joslin Vision Network Teleophthalmology Program — helps reach underserved Native American populations, which have high rates of diabetic retinopathy. This considerable Academy achievement results from relentless staff engagement with members of Congress who helped champion the issue.

OPHTHPAC: HELPING OPHTHALMOLOGISTS NAVIGATE THE HALLS OF CONGRESS

OPHTHPAC®, the Academy's federal political action committee, was critical in keeping ophthalmology's

friends seated in Congress in 2018. Ninety percent of OPHTHPAC-supported candidates were victorious in their races during the November midterms.

These results give the Academy a running start as we seek to build meaningful relationships with Congress' newest lawmakers in 2019.

Give ophthalmology new opportunities to impact federal policies by making an OPHTHPAC contribution today. Visit aao.org/ophthpac or text MDEYE to 41444.

SURGICAL SCOPE FUND: SUPPORTING YOUR COMMITMENT TO SURGERY BY SURGEONS

With help from the Academy's Surgical Scope Fund, ophthalmologists in eight states succeeded in their efforts to preserve high surgical standards. These results show the profound impact of Surgical Scope Fund-sponsored resources and staff support in these challenging battles. Even when state societies are upstaged by optometry in terms of money and political clout, the Surgical Scope Fund helps our profession defy the odds when surgery by surgeons is under attack.

The Academy anticipates that as many as 30 states will face optometric surgical scope challenges in 2019. It is therefore



paramount that we work to strengthen the Surgical Scope Fund as an extension of our calling to protect sight.

[Become a champion for patient safety today by making a minimum Surgical Scope Fund contribution of \\$500.](#) You'll be giving threatened states the critical resources they need to preserve high surgical standards.

PHOTO: Ophthalmologist Aaron M. Miller, MD (left), hosted Rep. Kevin Brady, R-Texas (center), at his practice in Houston to help advance the Academy's federal advocacy priorities.

Transforming the Profession and Revolutionizing Patient Care

THE MID-YEAR FORUM is one of the Academy's most significant yearly meetings, bringing the ophthalmology community together to implement the highest quality of care for patients through politics, policy and practice management. [Mid-Year Forum 2018](#) offered a peek into the future of ophthalmology by addressing the application of artificial intelligence in diagnosing and treating disease in clinical practice. The session, "The Future of Artificial Intelligence in Ophthalmology," featured Lily Peng, MD, PhD, a Google product manager who discussed deep learning for the detection of diabetic eye disease. Google Ventures General Partner Krishna Yeshwant, MD, MBA, examined the potential of AI in health care, its promises and limitations, and what the future holds.

Attendees were captivated by the keynote speaker, decorated NASA astronaut David Wolf, MD, EE, U.S.

Air Force senior flight surgeon in the Air National Guard (1983 to 2004). He discussed his illustrious career and provided insight into his space flight experiences and the unique ways in which space flight affects the eye and vision changes.

BREAKING ATTENDANCE RECORDS ON CONGRESSIONAL ADVOCACY DAY

A record 442 [Congressional Advocacy Day](#) participants descended on Capitol Hill to advocate to legislators and healthcare staff on the issues that affect our profession and our patients. As a result of our efforts, the Academy obtained 13 cosponsors on key, Academy-backed legislation; optometry's efforts to derail the VA's Technology-Based Eye Care Services program failed to gain traction with legislators; and 100 congressional offices were primed to support our concerns on prior authorization and contacted CMS about its prior-authorization policy.

At the Congressional Advocacy Day dinner briefing, [Meron Haile, MD](#), was named the inaugural Robert A. Copeland Jr., MD, Advocacy Education Fund fellow.

INSPIRING YOUNG ACADEMY MEMBERS TO ENGAGE IN THEIR PROFESSION

[L.E.A.P. Forward 2018](#), a session specifically geared toward Advocacy Ambassadors during Mid-Year Forum 2018, gave young members an opportunity to network and interact with advocacy leaders in ophthalmology. The L.E.A.P. (leadership, engagement, advocacy and practice management) Forward concept was first introduced at Mid-Year Forum 2015. Each subsequent year, the session organizers, the Academy's Young Ophthalmologist Committee and the Secretariat for State Affairs have recommended improvements to the session. Enhancements to the session at Mid-Year Forum 2018 included placement of previous years' [advocacy ambassadors](#) on the agenda to highlight how



they've become engaged as leaders in our profession; the addition of a Q&A session for advocacy ambassadors with Academy CEO David W. Parke II, MD; and increased time for participants to interact in roundtables with Academy, subspecialty and state society leaders.

PHOTO: Retired NASA astronaut David Wolf, MD, EE, provided insight into how space flight affects the eye during the keynote address at Mid-Year Forum 2018.

Supporting Innovative Programs That Educate and Inspire

THE [AMERICAN Academy of Ophthalmology Foundation](#) is the lifeblood of the Academy and a steward of our mission to protect sight and empower lives. Generous support from our donors, including Academy members, corporations and friends, enables us to implement and maintain innovative resources and services. In 2018, the Foundation raised more than \$10 million in support of several key programs. These include the continued innovation and expansion of the ONE Network, growing global outreach programs, providing eye exams at no out-of-pocket cost to qualifying seniors through EyeCare America and announcing a capital campaign to build a permanent Museum of Vision.

PAVING THE WAY FOR THE WORLD'S FIRST COST-FREE PUBLIC MUSEUM OF VISION

Extraordinary gifts from Academy Past President Stanley

M. Truhlsen, MD, and Michael F. Marmor, MD, kickstarted the [\\$12 Million campaign](#) to build a new [Museum of Vision](#), which will introduce visitors from around the world to the science and history of sight. Located at the Academy's headquarters in San Francisco, the new museum will be a public home for a rotating selection of ophthalmic artifacts from the Foundation's 38,000-piece collection — until now, only accessible online or by appointment. The world's first cost-free public museum and education center dedicated solely to vision is set to open in 2020.

Read more about the new Museum of Vision on page 17.

ORBITAL GALA: BENEFITTING THE MUSEUM OF VISION THROUGH GIVING

Co-Chairs Ruth D. Williams, MD, Stephen C. Gieser, MD, MPH, Ron W. Pelton, MD, PhD, and Wendy Pelton welcomed more than 350

guests to the 2018 [Orbital Gala](#). The '60s-themed party and auction was held at the Chicago Cultural Center under the famous Tiffany Dome during AAO 2018. The event generated more than \$130,000 for the Museum of Vision campaign. Orbital Gala attendees have raised more than \$2 million over the past 15 years in support of the Academy's programs.

UNITING WITH THE KNIGHTS TEMPLAR EYE FOUNDATION FOR PEDIATRIC RESEARCH

The Foundation designated a \$2 million contribution from the Knights Templar Eye Foundation to a pediatric ophthalmology research fund. The endowment powers a first-of-its-kind online resource offering the latest big-data analytic advancements in pediatric disease and disorders treatment, a peer network specific to the care of pediatric patients and individualized learning driven by the IRIS Registry. The groundbreaking power of the



IRIS Registry will enable physicians to improve quality of care in this most vulnerable population.

Visit our website to [make a donation](#) to the Foundation.

PHOTO: AAO 2018 Orbital Gala attendees Natasha L. Herz, MD, and Rebecca J. Taylor, MD, got groovy at the '60s-themed party and auction at the Chicago Cultural Center. All proceeds benefit the Academy's effort to build a physical museum in San Francisco that will celebrate the history of ophthalmology.

Creating a Permanent Home for the History of Our Profession

FOR DECADES, the [Museum of Vision](#) committee has envisioned a place where the public can celebrate our most precious of the five senses. Thanks to substantial donations from Academy Past President Stanley M. Truhlsen, MD, and Michael F. Marmor, MD, plans are underway to construct the new Museum of Vision, the only publicly accessible, comprehensive collection of ophthalmic artifacts on permanent display in the United States.

Until now, the 38,000 ophthalmic artifacts in the collection of the American Academy of Ophthalmology Foundation have only been accessible online or by appointment.

This free public museum and education center will introduce the world to the science of sight and the innovations designed to protect it. It will have a permanent home at Academy headquarters in the heart of San Francisco's Fisherman's Wharf, further advancing our goal to educate the public about vision and eye health.

DELIVERING AN INTERACTIVE EXPLORATION OF SIGHT

From virtual reality headsets to interactive screens, the museum will use cutting-edge technology to deliver impactful experiences to families from around the world. Visitors will interact with educational displays and experience the simulated effects of blinding eye diseases. High-tech displays will include virtual walking tours through our anatomy, explorations of how our visual system works and deep dives into the historical collection.

The museum will have a soft opening to coincide with AAO 2019 in October and a grand opening in 2020. The goals of the museum are to:

- Preserve the rich history of ophthalmology and vision scientists
- Celebrate and inspire innovation in eye care
- Promote eye health on a broad scale

The campaign to build a new Museum of Vision is one of the Foundation's key initiatives. [Donate now](#) to help the Foundation create a financially sustainable museum and help push fundraising efforts toward the \$12 million goal.

Watch this [video](#) to learn more about the Museum of Vision campaign.



PHOTO: Set to open in 2020, the Museum of Vision will be the only publicly accessible, comprehensive collection of ophthalmic artifacts on permanent display in the United States.

Enriching Quality of Life Through the Gift of Sight

AFTER SUFFERING sun damage when she was 13, Biggs, Okla., resident Betty White's vision recently became much worse. As her cataracts began to progress, glasses no longer helped. Her quality of life slowly declined, and she was no longer able to garden or play the piano — until her niece discovered [EyeCare America](#)®, the Academy's public service program that provides free or low-cost eye care through volunteer ophthalmologists.

EyeCare America helps medically underserved older Americans who have not seen an ophthalmologist in three or more years. It's one of the most successful public service programs in American medicine, having helped nearly two million people nationwide.

"Every extra penny I have goes to paying bills and just getting by," Ms. White said. "I had nothing extra to pay for an eye exam, let alone follow-up care."

EyeCare America volunteer Ryan P. Conley, MD, of Tulsa, Okla., donated his time to remove Ms. White's cataracts, restoring her vision and quality of life. She's now back to playing the piano, gardening and spending time with her family.

"I still can't get used to not reaching for my eyeglasses," Ms. White said. "Thank you, EyeCare America, for caring about people like me."

EyeCare America is dedicated to raising awareness about the importance of eye exams and providing sight-saving and life-changing care to underserved communities. More than 5,500 ophthalmologists volunteer to help

patients like Ms. White by offering a comprehensive eye exam for eligible seniors — often at no out-of-pocket cost — or a glaucoma exam for those eligible under the glaucoma program.

This critical work is supported by the Academy Foundation and has received major funding for more than 20 years from the Knights Templar Eye Foundation.

DONATE YOUR TIME AND CHANGE LIVES IN YOUR COMMUNITY

As a volunteer, you can make a meaningful difference in the lives of these patients with a minimal time commitment and without even leaving your office. [Volunteer for EyeCare America today.](#)



PHOTO: Betty White's vision was so severely limited by cataracts that she was unable to participate in her favorite pastimes, such as gardening or playing the piano. Thanks to EyeCare America volunteer Ryan P. Conley, MD, her vision was restored.

Improving Economics, Practice Efficiency and Quality of Care

TO MEET THE overwhelming business challenges faced by every ophthalmic practice, the [American Academy of Ophthalmic Executives® \(AAOE\)](#), the Academy's practice management affiliate, has taken the lead in helping ophthalmologists develop strategic solutions that unlock value for their practice and the patients they serve. In 2018, AAOE bolstered its outreach and practice management resources to help you improve profitability, practice efficiency and quality of patient care:

- [Ophthalmology Business Summit](#) — In 2018, the inaugural summit brought together physician leaders, business experts and senior Academy staff to address the urgent financial and operational challenges currently facing modern practices. The second annual Ophthalmology Business Summit is scheduled for March 23–24, 2019, in Chicago. View the curriculum and register

today at aao.org/business-summit.

- [The Profitable Retina Practice: Strategically Grow Your Retina Practice](#) — Designed specifically for retina physicians and practice administrators, this new downloadable handbook uses real-life case studies and detailed checklists to help retina practices produce steady and healthy growth.

PROTECTING PRACTICE REVENUE WITH NEW CODING TOOLS

As the premier ophthalmic reimbursement resource, AAOE expanded its offerings in 2018 to match every important coding topic along every learning curve. New resources launched this year include:

- [Coding Audit Success Toolkit](#) — This popular new downloadable resource helps practices stay compliant with payer requirements and proactively prepare for audit situations. Academy and AAOE members

can benefit from additional information and continuous updates at aao.org/audits.

- [Ophthalmic Coding Specialist Exams](#) — Last year, the Academy introduced the Ophthalmic Coding Specialist Retina (OCSR) exam. The first and only one of its kind, the OCSR exam provides a unique testing and credentialing opportunity for retina physicians and staff. [Learn more and take the exam.](#)

CULTIVATING NEW RESOURCES FOR SUCCESSFUL MIPS REPORTING

In addition to developing the IRIS Registry (see page 7), which is ophthalmology's tool of choice for the Merit-Based Incentive Payment System, the Academy and AAOE developed a rich range of MIPS resources, including:

- [MIPS 2018: A Primer and Reference](#) is a 60-page booklet that shipped with the June issue of *EyeNet Magazine*.



- [Quick MIPS](#) 2018 is a series of short videos (2–7 minutes) that get straight to the key details.
- [Medicare Physician Payment](#) is a webpage designed to help physicians navigate Medicare reimbursements.

PHOTO: (left to right) Sonny Goel, MD, Purnima S. Patel, MD, and Janice C. Law, MD, participated in the inaugural Ophthalmology Business Summit, where physician leaders and business experts addressed the urgent business challenges facing ophthalmic practices.

Reinforcing Our Mission With Stories That Inform, Inspire and Unite

EVERY MONTH, the Academy showcases [patient stories](#) to demonstrate the transformative value of our profession by highlighting a single patient and the life-changing care they received from Academy-member ophthalmologists.

One patient story featured [Creed Pettit](#), who was diagnosed with Leber congenital amaurosis. By age 9, his vision was so poor that he needed a high-powered flashlight to help him read, draw and find the sandwich in his lunchbox.

Creed received gene therapy from Audina M. Berrocal, MD, a pediatric retinal surgeon at the Bascom Palmer Eye Institute in Miami. Within days, the young patient could see details he had never seen before.

[Watch this video](#) to learn more about Creed's story.

[Submit your own story for consideration.](#)

AMPLIFYING OUR VOICE WITH AWARD-WINNING PUBLIC AWARENESS CAMPAIGNS

The Academy's public awareness campaigns are highly celebrated for demonstrating the value of medical and surgical eye care and promoting the Academy's role as the leading association for the profession. PR News' annual Platinum PR & Agency Elite Awards honored two of the Academy's key public relations campaigns. The campaign to [increase eye safety during a solar eclipse](#) won in the nonprofit category, while the animated video feature, [Eight Steps to Protect Your Sight From Contact Lens Infections](#), ran up against entries from Microsoft and the Smithsonian National Museum of American History and received an honorable mention.

"It was thrilling to see the Academy recognized among the nation's top companies and associations this year," said Dianna L. Seldomridge,

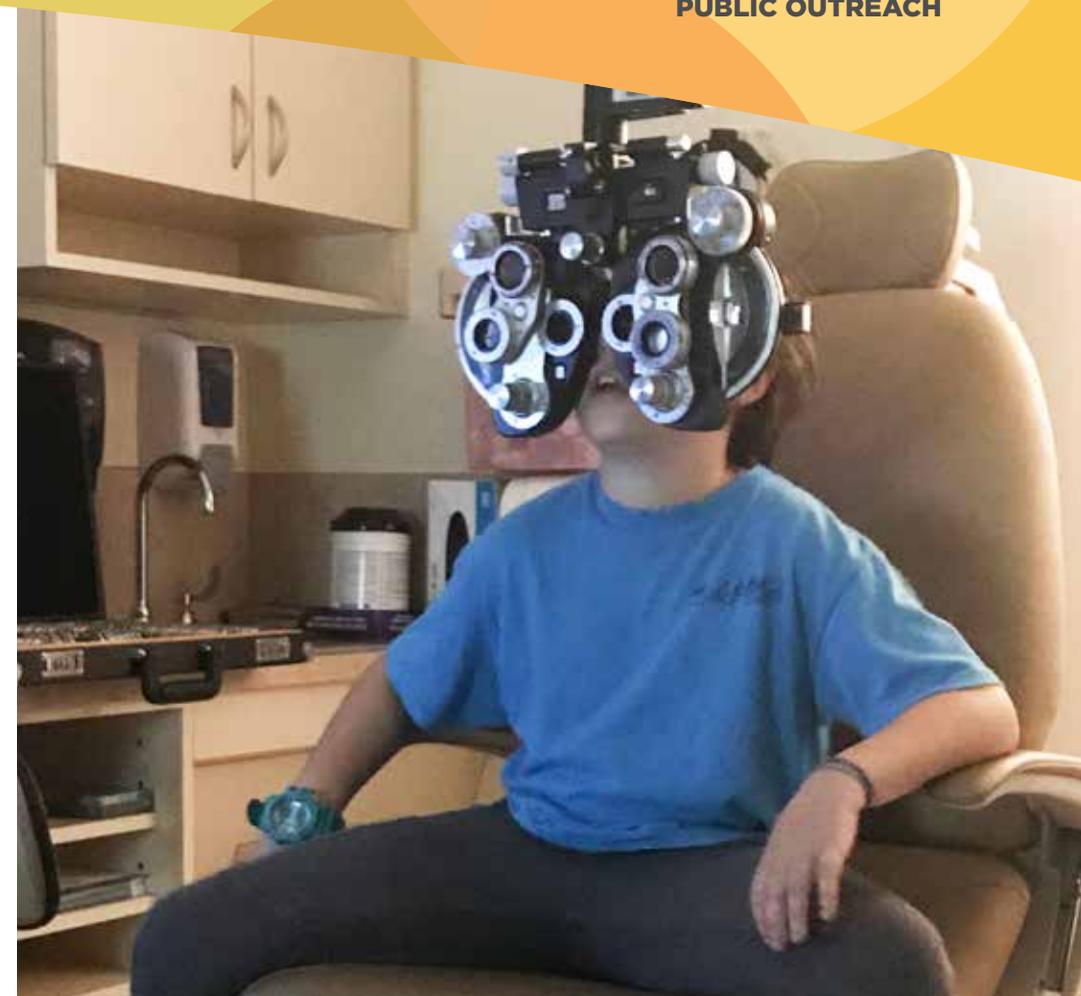
MD, MBA, the Academy's Secretary for Communications. "It's gratifying to see the Academy's public outreach campaign continually recognized for excellence."

The Academy was mentioned more than 32,000 times in the media. Many of these news accounts feature commentary from Academy physician spokespeople, in notable outlets that include: CNN, *Forbes*, *The Washington Post*, *New York Post* and *Chicago Tribune*.

Putting our experts at the forefront of eye health news allows us to assure that the public is receiving the most up-to-date and accurate information, resulting in better-informed patients.

EXTENDING OUR SOCIAL MEDIA REACH

The Academy's social media strategy includes public- and member-focused content across Facebook, Twitter, LinkedIn and YouTube. In 2018, the Academy made its debut on [Instagram](#). Our



Instagram content includes images and videos about ophthalmologists and their patients as well as information about the importance of protecting vision and preventing eye disease. This communications strategy demonstrates how the Academy is using social media to reinforce the importance of ophthalmology to the public.

PHOTO: Within a month after gene therapy, Creed Pettit, diagnosed with Leber congenital amaurosis, could see well enough to explore the outdoors, go for walks and pick flowers.

Celebrating Contributions to Patients and the Profession

THE ACADEMY [recognizes the outstanding contributions of our physician members.](#)

These honorees distinguished themselves by generating groundbreaking advancements that shape the way we care for patients.

David Heiden, MD, and William L. White, MD, received the [2018 Outstanding Humanitarian Service Award](#) for their charitable contributions to ophthalmology. Both performed community service above and beyond the typical duties of an ophthalmologist.

The Directors of Medical Student Education in Ophthalmology received the [2018 Distinguished Service Award](#), which honors an individual or organization for ongoing notable service to ophthalmology and the Academy.

These educators were recognized for their work in providing future physicians with the core knowledge and skills necessary to evaluate the visual systems. By doing so, they establish a strong ophthalmic foundation for medical students who do not specialize in ophthalmology.

The Ophthalmology Section of the National Medical Association received the [2018 Special Recognition Award](#), presented to an individual or organization for outstanding service in a specific effort or cause that improves the quality of eye care. The association was honored for its commitment to improving the quality of health among minorities and disadvantaged people through its professional development, community health education, and partnerships with federal, academic and private agencies.

Bradley C. Black, MD, received the [2018 Outstanding Advocate Award](#) for developing collaborative relationships with groups who care for children's vision.

Jacob J. Pe'er, MD, received the [2018 International Blindness Prevention Award](#) for his efforts to restore sight worldwide.

The [2018 Straatsma Award](#), which honors an outstanding ophthalmology program director, was presented to **Preston H. Blomquist, MD,** for his commitment to resident education, active engagement in program leadership and devotion to teaching, mentoring and advising residents.

For her dedication to serving the needs of the underserved throughout the world, **Camila V. Ventura, MD, PhD,** received the [2018 Artemis Award](#), which recognizes a young ophthalmologist for exemplary care and service to his or her patients.



Julia A. Haller, MD, received the [2018 EnergyEYES Award](#), which celebrates an ophthalmologist who mentors young physicians, serves as a strong role model and displays high energy that motivates engagement.

PHOTO: The Laureate Recognition Award is the Academy's highest honor, recognizing individuals among our membership who have made seminal contributions to ophthalmology. The 2018 recipient was **Steven T. Charles, MD (center-right)**, for his work as a leader of and catalyst for the incredible advances in vitreoretinal surgery since its introduction in the 1970s. **Paul Sternberg Jr., MD, 2018 Academy President Keith D. Carter, MD, FACS, and Academy CEO David W. Parke II, MD (left to right)**, presented the award during AAO 2018.

Supporting Your Success With Unique Benefits

AS A MEMBER of the American Academy of Ophthalmology — the world's leading association of eye physicians and surgeons — you're an integral part of a global community with a common goal to protect sight and empower lives. Only Academy members [reap the full rewards](#) of our programs. Free annual meeting registration, unrestricted access to innovative educational media, cutting-edge research and more members-only benefits all help support your success and provide the highest-quality care your patients deserve.

EMBRACING YOUR FEEDBACK TO INCREASE VALUE AND MEET YOUR NEEDS

Member feedback is crucial to the growth of Academy programs. We rely on membership data to develop and enhance programs and services that are both responsive and relevant to your needs. The ONE Network, IRIS Registry,

Ophthalmology Glaucoma journal and Retina Express e-newsletter are examples of resources that evolved from your ideas and insights. In addition, concerns about physician depression and physical pain prompted us to develop [wellness resources](#) designed to help individuals and practices restore their well-being. The AAO 2018 wellness program included two sessions offering practical tips.

These initiatives increase the value of membership and in turn, allow us to thrive as individuals and as a 32,000-member community. As a result, our [2018 Member Engagement Survey](#) indicates outstanding satisfaction rates among practicing ophthalmologists:

- 95% (international) and 86% (U.S.) believe the Academy helps them be better ophthalmologists
- 90% (U.S.) see the Academy as the leading source for reliable ophthalmic information and education

- 89% (U.S.) feel the Academy's advocacy efforts provide an effective voice for the profession
- 93% (international) see the Academy as the leader in developing global standards and guidelines for quality eye care

DELIVERING SOLUTIONS FOR THE FULL SPECTRUM OF CHALLENGES YOU FACE

The American Academy of Ophthalmology is the leading resource for ophthalmic education and practice resources. Stay on top of the latest clinical developments, grow your network and improve practice efficiency with your exclusive [member benefits](#) that are included with your yearly dues:

- [AAO 2019](#) — Where All of Ophthalmology Meets®: Free registration for the preeminent annual meeting (a \$975 value)
- [ONE Network](#): Unrestricted access to thousands of self-assessment questions, instructional videos, interactive quizzes and courses (a \$3,900 value*)



- [IRIS Registry](#): Use of the largest medical clinical registry — and No. 1 money-saving MIPS reporting tool (U.S.) (a \$23,250 value*)
- *Ophthalmology*® journal, *EyeNet*® Magazine and 12 other [peer-reviewed journals](#) (a \$1,862 value)
- [Mid-Year Forum](#): Invitations (U.S.) to meet with legislators and help shape ophthalmology's future

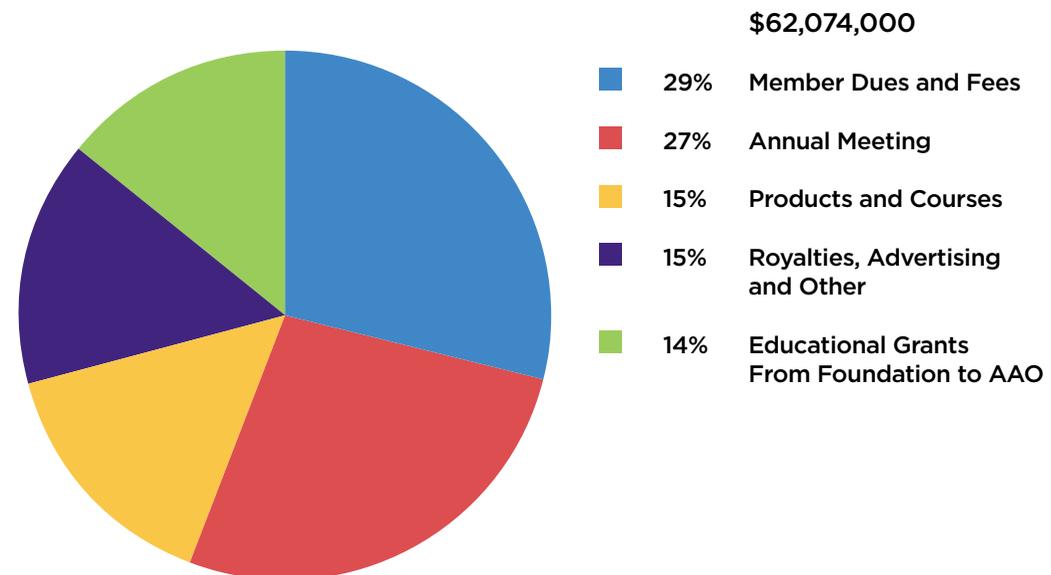
PHOTO: Ioannis Datseris, MD, and A. John Kanellopoulos, MD, connected during the Academy's annual meeting — the best place to get live, hands-on instruction, interact with world-class presenters and expand one's network.

*Estimated average

Academy Actuals for Fiscal Year Ending 2018

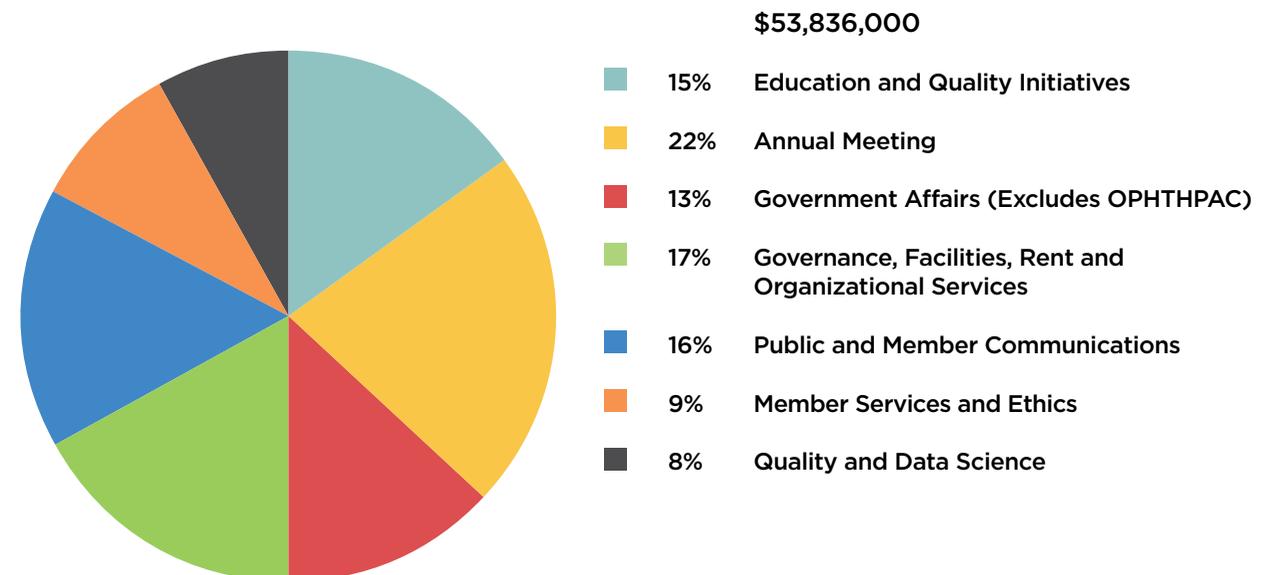
FYE 2018 Revenue — Academy Only*

Major categories of revenue have remained relatively stable.



FYE 2018 Expenses — Academy Only*

Top expense categories are education-related.



*Revenue and expenses presented exclude OPHTHPAC and Academy Services, Inc. activity.



Vietnam veteran Bobby Moyers, 70, lost his health insurance and was rapidly losing his vision to cataracts and a degenerative eye disease that required corneal transplant surgery. After receiving treatment from Augustine R. Hong, MD, Mr. Moyers is now able to see colors and details he hasn't seen in years. Read more about our patient stories campaign on page 20 or [online](#).

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