

SCOPE

Lunacy

W. Banks Anderson, Jr., MD

hy has the moon over the centuries received such bad press? Shakespeare has Othello exclaim after he has murdered his innocent Desdemona: "It is the very error of the moon; She comes more nearer earth than she was wont. and makes men mad." The uveitis of horses is labeled Moon Blindness as recurrences were linked to phases of the moon. Sleeping in the light of the moon was believed to produce lunacy, a word derived from Luna, the Latin goddess of the moon. Obstetrical and trauma cases are supposed to increase during full moons although good data has never shown a real relationship. Witches ride their brooms in its light. Could this centuries old fear, superstition and aversion actually be related to the color of moonlight?

Ages past comforting night lighting usually meant flame. Torches, oil lamps, the hearth, and the candle, are inviting methods of banishing the dark. We call these lights "warm" reflecting the fact that all are associated with heat. But by the conventions of physics this light is actually of a low color temperature. When you heat a black body or the filament of an incandescent bulb, what you get at lower energy inputs is heat - infrared. As you add more energy the filament begins to glow red and then orange and then yellow as its temperatures rises, the higher the temperature the whiter and bluer the light. Lighting scientists assign temperature in

degrees Kelvin to the color of the light emitted by the heated black body and then extrapolate a color temperature that matches that emitted nonthermally by a light emitting diode (LED) or a compact fluorescent lamp (CFL). The light temperature of that sensuous candle is 1,800 K. Of much higher temperature is the "cooler" light of the moon at 4100 K and that of those unpleasant LED street lights at 4000 K. Bluer yet are some mercury vapor street lamps at 6,800 K.

We despise night lights of 4000 K or above although during an overcast day outdoors we are bathed in light of 6,500 K. We shun "daylight" fluorescents at 5000 K for indoor home use much preferring the "soft white" ones at 3000 K even though they are less efficient. And the superstition associated with bluer moonlight has recently spread to entire communities as the new highly efficient LED street lamps are being substituted in luminaires. Like moonlight, these

4000 K lights are perceived as unhealthy. The AMA House of Delegates in a 6/14/16 press release warns: ... some LED lights are harmful when used as street lighting." They are associated with "reduced sleep times, dissatisfaction with sleep quality, excessive sleepiness, impaired

daytime functioning and obesity." The release calls upon communities to "minimize and control blue rich environmental lighting". No recommendations are offered as to how to avoid blue rich moonlight or for that matter the richer 6000 K sunlight bathing summer streets in lands of the midnight sun. The benefits of bedroom curtains or shades might have been mentioned. But just wait until next year when we will be bombarded with predictions of blindness from viewing the total solar eclipse traversing the US. Although unobstructed sun reflected from building glass and shiny autos is part of our daily environment, the totally eclipsed sun with only its corona visible will be trumpeted as blinding. During totality we are not observing the sun at all but our haloed full moon. These warnings are understandable as the untutored may not appreciate the vast difference between prolonged viewing of a partially obstructed sun as opposed to that necessarily brief view of our moon as it totally eclipses it.

Ah poor Luna, her phases, her horns, and her unhealthy light are all that sun's doing as she is only reflecting.
Lunacy persists but it isn't her doing. It's that bluer 4100 K sunlight she reflects that has given her such a bad name.

Meet the Real Doc Blanchard, MD

William S. Tasman, MD

oc Blanchard entered college during WWII starting at the University of North Carolina, although he had received an appointment to West Point upon graduating from high school. In 1943 Doc's father received a telephone call from Colonel Earl Red Blaik wondering if Dr. Blanchard's

son would like to come to West Point. Blaik had been unaware that a West Point offer had been previously made, but on this occasion Blanchard accepted the offer. Doc went on to become an All-American and won just about every award such as the Heisman, the Maxwell, and the Sullivan. He also acquired a teammate named Glen Davis, who was as quick as a rabbit and could get outside the end. They became known as "Mr. Inside"

and "Mr. Outside," and dominated college football of that era.

Doc, by the way, was nicknamed "Little Doc" by his father, who was a physician and who was often accompanied by Little Doc when his father made house calls. As you are about to learn, medicine continued into Doc's generation because his sister, Mary Elizabeth, became an obstetrician and gynecologist.

Things then were a lot different from now. For example, the University of Pennsylvania played their home games on Saturdays at Franklin Field to 60,000 people. My father was on the faculty of the Graduate School of Medicine at Penn so we had season tickets providing an opportunity to see such stars as Tom Harmon of Michigan and of course Blanchard and Davis from West Point.

In 1955-56, I interned at Philadelphia General Hospital (PGH). There was no 911 in the 1950's and 1960's, so families would call PGH when a delivery was imminent. PGH had its own ambulances and they would send an intern out to make sure everything was okay. Many times, the baby had already



1955 Topps All American card

precipitously delivered, but the placenta and the cord still had to be attended to. We were given small fish scales, and after everything was under control, we would diaper and then weigh the baby on the fish scale. If he or she was 4 pounds or more the baby could stay in the house with the family, but if under 4 pounds we were instructed to bring the baby back to the hospital.

In a small world story, I met Doc Blanchard's sister, Mary Elizabeth, when I was an intern at PGH, and she was an OB resident. Maternity was in a separate building in North Philadelphia, remote from the main PGH campus.

Dr. Mary Elizabeth Blanchard was the resident one night when I was on call. She later practiced obstetrics in South Carolina. There was one incident with Mary Elizabeth which I vividly remember. A father-to-be came in and insisted on going into the delivery room. This request was in the days when you didn't have the whole neighborhood in the delivery room so I tried to tell him that he couldn't go in. Furthermore, he had had overserved himself with celebratory alcoholic beverages. It was at this point that Mary Elizabeth came in. She looked over the situation and under her leadership "Dad-to-be" was subdued. The story had a

happy ending with an uncomplicated delivery of a healthy baby.

A few years later I ran into Doc Blanchard when I was in the Air Force in Germany and he was stationed in England at an airfield near London. At that time, there was no Air Force Academy and Doc had elected to go from West Point into the U.S Army Air Corps. He became a pilot and flew, during the

Vietnam war over 113 missions from Thailand, 84 of which were over North Vietnam. He flew Sabre Jets and later Fighter Bombers. Doc received a commendation for Valor because his plane developed a fire on board and rather than eject and let the plane crash on the houses and people below he guided it to a smooth landing at his airfield.

There were many opportunities along the way but Doc turned all of them down to devote his life to flying. He retired from the Army Air Corps as a full bird colonel, but unfortunately died of pneumonia April 19, 2009. At the time of his death he was the oldest living Heisman Trophy winner and his number 35 was retired on October 10 at a home game against Vanderbilt. Mary Elizabeth is still doing well, and it was fun for me to speak with her again after all these years.





Changes

M. Bruce Shields, MD

s we enter the new year, we can anticipate many changes at home and around the world. But there is one change occurring closer to home about which I am especially optimistic, and that is the changes that you will be seeing in coming issues of SCOPE.

My optimism stems from the fact that we are building on the solid foundation that was laid down by Dr. David W. Parke, who guided our quarterly newsletter for the past fourteen years and molded it into the publication that we senior ophthalmologists have come to enjoy today. As we noted in the last issue, Dr. Parke has elected to step down as Editor of SCOPE, and those of us who are left to fill his big shoes have an awesome task indeed. but one made somewhat easier by the knowledge that we are standing on the shoulders of a giant and one who will hopefully continue to make contributions to the newsletter.

Of course, no one person could fill Dr. Parke's shoes, and so we are fortunate to have an editorial team to attempt this task. The team is composed of both some veterans and some new blood. For many years now, we have been entertained by the intriguing writings of our two Senior Associate Editors, Drs. W. Banks Anderson and William S. Tasman, who have shared with us their remarkable depth of knowledge on such a wide range of topics. I am pleased to report that we will continue to enjoy the fruit of their talents in the coming issues of *SCOPE*.

I am also pleased to report that we have added new members to our Editorial Board, who will be bringing new features to our newsletter. Dr. Thomas S. Harbin will be editing a "Book Review" section in which we can share with each other brief reviews of books that we have found to be especially noteworthy. Contributions in the current issue have come primarily from members of the SO Committee, but all readers are invited to contribute to this section in future issues. Dr. Harbin has also developed an exciting new section to foster interaction between YOs and SOs, in which the former can ask any questions they wish and the latter will provide responses that will be published in the newsletters of both groups.

Another new section of SCOPE, "Ophthalmic History," will be edited by one of the world's foremost ophthalmic historians, Dr. Daniel M. Albert, who will bring us in each quarterly issue an article on our heritage that was either written or edited by him. In the present issue, Dr. Donald L. Blanchard, another leading ophthalmic historian, inaugurates this new section with a fascinating article on the ocular histology contributions by the author of Gray's Anatomy.

In addition to our Editorial Board, we have been fortunate to have input of the Chair of the SO Committee, Dr. Susan H. Day, who has been invaluable during this transition phase of *SCOPE*. And there are two people, working quietly behind the scenes, without whom our

newsletter would never see the light of day. Ms. Neeshah Azam is our Assistant Editor, but in fact oversees every aspect of SCOPE, insuring the quality that we have come to enjoy, and Ms. Lourdes Nadon puts it all together to give us the pleasing design format of each issue. These two women make the rest of us look good and, thank heaven, we will continue to benefit from their skills as we move into this next phase of our newsletter.

But there is one more contributor that is vital to the success of SCOPE, and that is you our readers. It has always been Dr. Parke's intent that this should be an interactive newsletter in which all senior ophthalmologists have the opportunity to contribute, and we hope that this can become an even greater part of the publication as we move forward. So I hope all of you will feel welcome to contribute articles from your experiences and interests, as well as brief reviews of books you would like to share with your colleagues, vignettes from your career in the "As I Remember It" section, or anything else you would like to share with us.

I look forward to sharing this forum for exchange of thoughts and interests with you, and I wish you the very best in the new year.

As I Remember It

Vignettes of the days of training and early practice

SCOPE solicits interesting and entertaining vignettes of readers' days of training and early practice.

Please limit your submission to about 500 words.

Send submissions by email attachment to scope@aao.org

The Retina According to Henry Gray

Donald L. Blanchard, M.D.

n 1849, Henry Gray wrote "An Essay on the Origin, Connections, and Distribution of the Nerves of the Human Eye, and its Appendages; illustrated by Comparative Dissections of the Eye, of other Vertebrate Animals." Although the nearly 400 page text won the Royal College of Surgeons' Collegial Triennial Prize of 50 guineas, it was never published or reproduced. Some of his dissections still exist, but many were destroyed in WWII bombings. While Gray's Anatomy, first published in 1858, is a classic of general anatomy textbooks, his "Essay" is virtually unknown. The retina section of the latter work is the main focus of this article.

Henry Gray's father was a private messenger for King George IV and for King William IV. Henry was a prize winning student in anatomy at St George's Hospital and soon was named Demonstrator and Lecturer of Anatomy, Post Mortem Examiner, and Curator of the Pathological Museum and then House Surgeon. He was a Fellow of the Royal College of Surgeons and later a Fellow of the Royal Society. His extensive study of the spleen won the Astley Cooper Prize of 300 pounds. After contracting smallpox from his nephew, Gray died in 1861.

His ground breaking ocular studies were hampered by difficulties with thin tissue sections, staining, and fixatives. It was frequently the case that the retinal tissue was macerated with needles. The various fragments were observed and then pieced back together like a mental jigsaw puzzle. This led to various theories about the layering of the retina and from where the different granules and pieces originated. A favored theory at the time was that the retina and

brain were one single nerve that had different layers and forms, mostly without cell membranes. No one, including Gray, had seen a synapse at that time. The visual functions of the different

layers were basically mysteries. He stated, "the way by which such sensation is produced, or transmitted is, and I think ever will remain an enigma, too subtle for our intellect to unravel."

He placed the origin of the retina in a serrated border posterior to the ciliary processes, rather than more anterior, as others claimed. He assigned the pigment epithelium to the choroid and

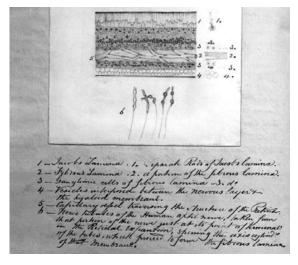
described its relation to the retina as "I have never however been able to trace any connection as has been described by 'cellular tissue and vessels'; between these two layers, the two membranes appear to be, in simple apposition."

Gray felt Jacob's Membrane (rods) was a single epithelial layer possibly of the same nature as a



Henry Gray, 1827-1861

serous membrane. Microscopically, the rod outer surface resembled "beautifully regular closed pavement." He clarified that many previously described irregularities at their free ends were artifacts. Importantly he found smaller bodies of an oval elongated nature, which he proposed to be nucleated rods in an early



Gray's image of the retina

stage of development. However he mentioned that William Bowman considered them as a separate group, which he called, "Bulbs".

Before Gray became a member of the Royal Society of London, a portion of his "Essay" concerning the embryology of the chick eye was presented by Bowman in 1850. A contemporary review stated, "Although Mr. Gray's paper wants completeness on some points, yet it is a highly valuable contribution to our previous knowledge, and promises well for the future eminence of an observer, who is, we believe, just out of his pupilage."

I wish to express my appreciation for Dr. Ruth Richardson's assistance in the preparation of this article, especially in the retrieval of the only copy of the original ophthalmic document by Henry Gray, which is in the library of the Royal College of Surgeons in London.

Book Reviews

elcome to a new feature of Scope, the column devoted to book reviews and recommendations. This initial column will feature books that members of the SO committee have enjoyed. We hope this will be interactive with our readers and that you will submit your favorite books to us. Rather than lengthy and formal reviews, we will go for brief descriptions of books we have enjoyed whether current or in the past. Please enjoy and engage with us by submitting your ideas to scope@aao.org.

Richard L. Abbott, MD

The Life and Times of the Thunderbolt Kid by Bill Bryson

For some lighter reading, the author shares his growing up years in the 1950s and 60s in the Midwest. His descriptions of every day events and life at that time will take you back to an era of innocence we will never see again. If you grew up during this time, you will laugh and reminisce about these times long gone. A hilarious book that is a pure joy to read.

Susan H. Day, MD

The Warmth of Other Suns: The Epic Story of America's Great Migration by Isabel Wilkerson

This sensitively written book is based on history (per the title), chronicling migration of African American Southerners to other parts of the United States. It is more than a story of history, however. The focus is on humans, on personal growth, on generational differences, and on varied responses to hardships and life's serendipitous events. It teaches perspectives of others, personal responsibility, and intrinsic life values where – if ignored – result in far-reaching ramifications.

Tamara R. Fountain, MD

The Digital Doctor by Robert M. Wachter

Explains how we got from our beloved paper chart to the EHR we love to hate now. Also, illustrates with a brutal case story how the EHR is not a panacea for medical mistakes and can in fact contribute to them. A must read for all health professionals.

Thomas S. Harbin, MD

Lee Child's *Jack Reacher* novels

I need page turners (Brain Candy) when I'm on an airplane and Lee Child's Jack Reacher series fills the bill. I have read most of them and enjoyed them all. Jack Reacher is a retired military policeman who drifts around the country with no luggage, no bags, only a toothbrush. He manages to get into trouble almost everywhere but ends up vanquishing the bad guys every time.

Samuel Masket, MD

And Then All Hell Broke Loose by Richard Engel

The author, now Chief Foreign Correspondent for NBC news, recalls his memoirs of 20 years in the Middle East as a peripatetic, onthe-scenes reporter of the pivotal times in the region. He personally witnessed many of the events of the "Arab Spring" and openly shares his views of those tumultuous political times and the opportunities and failures of our administrations.

Alfredo A. Sadun, MD, PhD

109 East Palace by Jennet Conant

Based on Dorothy McKibbin's unpublished diary. Dorothy was the gatekeeper of the "rabbit hole," an address in Santa Fe to which the brightest minds in the country flocked, and then vanished, as Dorothy sent them to the secret city of Los Alamos where they worked on the greatest feat of engineering in history: The making of the atomic bomb. But this is a meta-story, less about the scientific challenges and more about the human reactions to living in this strange and secret cauldron and pressures of bearing the responsibility for the outcome of the war and the soon to come new world of the atomic age.

M. Bruce Shields, MD

When Breath Becomes Air by Paul Kalanithi

A gifted neurosurgery resident is found to have stage four lung cancer and writes about his life, his passion for his profession and facing death. He died in 2015, and his wife wrote the final chapter. It is one of the saddest books I have read, but also uplifting and a commentary on the beauty of life.

Gwen K. Sterns. MD

The Quartet by Joseph J. Ellis

For those, like me, who have not yet taken out a second mortgage to see the blockbuster Broadway production, *Hamilton*, and who have neither the time nor patience to prepare for it by reading Ron Chernow's massive biography, Joseph J. Ellis provides a shorter, readable refresher course on the relevant history of the four men most responsible for the formation of our government: George Washington, Alexander Hamilton, John Jay, and James Madison.

C.P. Wilkinson, MD

A Man Called Ove. A Novel, by Fredrik Beckman

OK, folks, it's time for a little fun and relaxing reading. This is a delightful charming book guaranteed to produce laughs. Be sure and read this before venturing to the movie of the same name.

Why should Senior Ophthalmologists care about Advocacy?

Donald J. Cinotti, MD

ctually it should read, "Why would Senior Ophthalmologists stop caring about Advocacy?" Most of us have been advocates since medical school and residency. It's in our DNA. We have always tried to help our patients; every letter or phone call to an insurance company for a patient is advocacy. Every patient we cared for without getting paid was advocacy. We all sent letters or made calls to our legislators and that is advocacy.

Now as SOs, we are established experts in our profession and, just as our practices are slowing down, we have the time to play a leadership role in giving back to our profession. There are so many opportunities for you to help. On the national level, you can participate in the Congressional Advocacy program, where ophthalmologists serve as key contacts for members of Congress. These advocates develop relationships so that when important issues come up before the U.S. Congress, the Academy can quickly get its message to lawmakers through direct, personal communication.

Mid-Year Forum's Congressional Advocacy Day, held every April in Washington, DC, is another exciting way to get involved. Meet with your lawmakers on Capitol Hill and represent the issues that are important to ophthalmology. This is an event that draws a lot of residents and fellows through the Academy's Advocacy Ambas-

local lawmakers. All of your states employ lobbyists who could accompany you on your visits and teach you how to be an effective spokesperson for ophthalmology and for your patients.

Several states have retired physician special licenses where you don't need malpractice insurance and you can work in special clinics as a volunteer. You don't do surgery but it's still very



Dr. Cinotti educates a congressional staff member on issues important to ophthalmology during Mid-Year Forum's Congressional Advocacy Day

sador Program. These members in training and future leaders are in need of mentors which is a perfect fit for SOs. If you haven't attended in the past, it's a tremendous and rewarding experience.

Every state ophthalmology society needs volunteers to help in advocacy. Learn how government works by visiting your state capital and talking with your rewarding in helping low-income patients. If you don't live in a state with this type of license, you could work to get a law passed.

Another opportunity is volunteering to mentor residents and medical schools with ophthalmology programs. There is so much they need to learn about the practice and business of medicine. They also need SOs who can instruct them on the importance of advocacy.

Lastly, consider volunteering on international ophthalmology missions. Many organizations would love to have SOs lend their experience on helping people regain their sight. There are so many presbyopic patients that are so thankful to receive a pair of reading glasses.

Just because you are slowing down or even retired doesn't stop you from being a physician or relieve you of the responsibility as an advocate. Join me in continuing to advocate for our wonderful profession and patients.

Dr. Cinotti joins Georgia Mid-Year Forum attendees in presenting Sen. Johnny Isakson (R-Ga.) with the Academy's 2014 Visionary Award



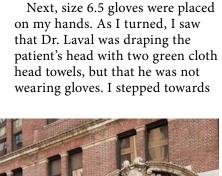
As I Remember It

The "LAST" Un-Gloved Eye Surgeon

Norman B. Medow, M.D. FACS

t was 7:00 a.m., July 7, 1969.
I was one week into my ophthalmology residency when my resident instructor, Dr. Larry Yannuzzi, told me to go to the operating room to help Dr. Joseph Laval with his cases for the day. I went to the 7th floor where the operating room was, opened the locker room, found some scrubs and an empty locker, changed and entered the operating room.

seven minutes above the elbow scrubbing, I returned and was given a towel to use to dry off with and then given gloves to use. Dr. Laval explained to me how to prep the eye and after prepping the eye, I turned to the scrub nurse who slipped off my gloves and slipped me into a heavy cloth green gown and tied it in place in the rear.





Dr. Laval was operating in room #3. Running through my mind was the fact that I had never been in an eye operating room, never even saw an eye operation! I had just returned from serving two years in the United States Navy Medical corps having been stationed part-time in Vietnam with the Marine's and part-time as a Flag Medical Officer stationed on a nuclear powered guided missile destroyer stationed in the Gulf of Tonkin. Wow... this was a very strange feeling.

Entering the operating room, I introduced myself to the scrub nurse, the circulating nurse and to a gowned physician standing behind the patient obviously waiting. I asked if there was anything special I should do, the scrub nurse told me to go scrub. After

him, (I believe I almost ran) and called out (yelled more like it), "Dr. Laval you are not wearing gloves!" As, I gently pushed him away from the patient, all movements stopped and the operating room became dead silent.

Dr. Laval spent the next 15 minutes (felt more like two hours) explaining to me why gloves were not required in ophthalmic surgery! He explained that the hands of the surgeon, actually primarily the fingers, held the instruments by their handles, never touching the operational part of the instrument, the blade, the point of the instrument or the hook. Following this discussion and rescrubbing, Dr. Laval proceeded to remove the cataract. He used a 180-degree groove with six pre-placed 6-0 silk sutures. The sutures were then



Norman B. Medow, MD in 1969

moved out of the way so that a 180-degree section could be made using the groove as a guide. He then grasps the lens with strange forceps (tumbling I found out later) and quick in a blink, out came the lens. The six pre-placed sutures were tied and he added 4 more.

I soon realized that I was watching an adept surgeon whose movements were like that of a Ballet Masters Choreography of Swan Lake. Dr. Laval was Emeritus Chair of Ophthalmology at Mount Sinai Hospital in New York and was now doing all of his surgery at Manhattan Eye, Ear and Throat Hospital. He had a well-established private practice just one block from the hospital, located in beautiful building with 12 foot ceilings and beautiful wood paneling... he had it all. Respectability, intelligence, and a fine ophthalmic practice, but... soon after this episode, he lost his right to operate without gloves.

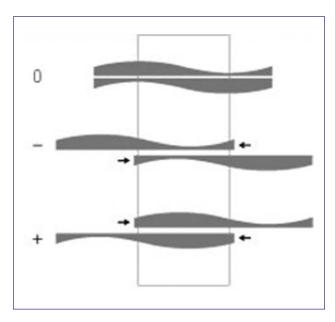
An era that had taken years for him to develop had finally come to an end. There were other people throughout the United States that used no gloves. It would take many more years for glove-less surgery to be completely replaced in ophthalmology. Today, there are still areas in the world that operate without gloves, but certainly not at Manhattan Eye, Ear and Throat Hospital. How do I know? Well, that is as I remember it.

Luis Alvarez: A Man For All Seasons

David Miller, MD

ost modern scientific discoveries are made by young people in their 20's when their creativity is thought to peak. Think Einstein or Steve Jobs at Apple. But creativity can

of the car was blurry in only one frame, confirming that the photographer was startled by only one set of gunshots, supporting the theory of a lone shooter.



Sliding surfaces of the Alvarez lens create different spherical powers

happen even late in life. Luis Alvarez, a Nobel Prize winning physicist, retired in his early 60's. But at 67, he and his son Walter hit a home run with the bases loaded when their 1980 paper in *Science* magazine explained how the dinosaurs became extinct.

Long before, in 1943, he worked on the atomic bomb and even flew on both the Hiroshima and Nagasaki missions. During the Vietnamese war, working with his attache, Daniel Ellsberg, of the Pentagon Papers fame, he developed a night vision binocular.

In November 1966, *Life* magazine published still photos of Abraham Zapruder's home movie of the Kennedy assassination. Alvarez noted that the sun's reflection on the bumper

Later, Alvarez was bothered by having to wear bifocals. He invented a special 2 element lens that creates different powers by sliding one lens over the other. His grad student, William Humphrey, went on to create the current day lensometer company using

Paleontologists long had evidence that

the Alvarez

lens principle.

dinosaurs had been on earth for about a hundred million years and then suddenly disappeared. Luis's son Walter, a PhD in geology at Berkeley, showed his father "a complicated rock" from Gubbio, Italy. It contained two layers of limestone separated by a thin layer of clay. The limestone layers, from the Cretaceous and Tertiary periods had microscopic fossils, but the clay layer showed no evidence of life. Walter also discovered high amounts of iridium in the clay layer. Further work by colleagues showed the iridium layer present across the entire globe. The iridium layer corresponded to when the dinosaurs disappeared. The fact that iridium is mainly found in meteorites got Alvarez to theorize that a gigantic meteor struck the earth, disintegrating, and spreading iridium over the whole planet.

In 1991 (3 years after Luis died) a meteor crater the size of Mt. Everest was discovered on the edge of the Gulf of Mexico. The Chicxulub Crater was roughly 6 miles in diameter. The Alvarez's calculations suggested that it struck the earth at 40,000 miles per hour and released 2 million times more energy than the most powerful nuclear bomb. The heat of impact would have broiled the earth's surface, created toxic vapors, acidified the oceans, ignited wildfires worldwide and plunged the planet into darkness as debris clouded the atmosphere and killed off the habitats that dinosaurs survived in.

Luis Alvarez and his son Walter



SOs: Meet the Millennials

Thomas S. Harbin, MD and James G. Chelnis, MD

hile Generation Xers already share in seniors' practices, the next wave is ready to join. Millennials outnumber baby boomers and are leaving training to join or buy our practice or set up shop near us. They will be our new colleagues as well as our doctors in the future.

We think seniors should be interested in bridging this generational gap. Accordingly, senior ophthalmologist (SO) and young ophthalmologist (YO) committees will be working together to create a question and answer based column through both Academy newsletters, SCOPE and YO Info.

- 3. Expect management to develop their leadership skills and provide effective training programs.
- 4. Want strong leaders and are more likely to request guidance and coaching.
- 5. Are more likely to seek work/ life balance.
- 6. Are more comfortable with shift work or part-time work.

Stereotypes provide a shortcut to make broad generalizations about a given group and by no means can be applied to each individual. Regardless, there are differences between us.



Millennials differ from seniors in several ways. The medical student cohort is half female. Each gender comprises a mix of Asian, Indian, Hispanic, African American and white, very different from the "old days."

The stereotypes regarding millennials include that they:

- 1. Don't expect to be at the same organization all their work lives.
- 2. Want a business to have a purpose beyond profit.

Of the Academy's U.S. based practicing ophthalmologist members, 32% have self-identified as solo practitioners and 49% are in a group practice. Of the U.S. members-in-training from the 2015 resident class, 88% indicated plans to complete a fellowship. The trick will be to match these two groups together, not an easy job for certain geographic locations.

What does this mean for senior physicians? Once you have found a match, you will need to posi-

tion yourself to achieve the best financial outcome of your practice addition or sale. Many millennials may expect strong leadership from the established doctors in the practice and may seek more guidance and feedback than we ever wanted or received. In addition, they, will need coaching on practice management techniques, as we all did after training.

If you are in a group, you may notice different attitudes when millennials join. They may be looking for more time off for life events like the birth of children. They will almost certainly be more tech savvy and more comfortable with electronic medical records and social media. They may never have encountered a paper chart. Seniors will find that each party will be making adjustments.

These principles apply to younger seniors who plan retirement well into the future. The desire of millennials to have more work/life balance and job sharing could work to the advantage of seniors who want to slow down and work less but not retire. (This option will be considered in more detail at the Senior Ophthalmologist Committee's symposium during AAO 2017 in New Orleans.)

In conclusion, millennials potentially differ in many ways from us seniors. While the totally stereotypical millennial does not exist, we can expect some of the characteristics ascribed to this group to apply. It's up to you to make millennials fit into your plans and smooth their transition from training. If you would like to be involved in bridge building between the YOs and SOs, submit your questions to scope@ aao.org and let the conversation begin. We will also solicit questions from YOs through their newsletter, YO Info.

AAO 2016 Was SO Innovating

Neeshah K. Azam

nnovation was the theme at AAO 2016 in Chicago and here is a recap of some of the events that were designed with Senior Ophthalmologists in mind.

Senior Ophthalmologist Special Program and Reception

The Senior Ophthalmologist Special Program and Reception featured two local Abraham Lincoln experts. Douglas Carlson, JD, took attendees on an historical journey of the iconic 1860 presidential campaign where unfavored candidate Abraham Lincoln made history just two miles from our meeting venue at McCormick Place. Beating his opponent Stephen A. Douglas, representing the Northern group of a heavily divided Democratic Party, Lincoln gained the White House with almost no support from the South. The results of the election served as an immediate motivation for the outbreak of the American Civil War.

Thomas Campbell, JD, author of *Fighting Slavery in Chicago*, *Abolitionists*, the Law of Slavery and Lincoln, delved into Lincoln's role as the Great Emancipator and described how Chicago abolitionists played a significant role in pushing slavery down the road to its ultimate extinction.

(I - r) Purnima S. Patel, MD; Grace Sun, MD; Thomas S. Copperman, MD, Jean E. Ramsey, MD, MPH; Avni U. Badami, MD Janice C. Law, MD and Tamara R. Fountain, MD



Finally, the Academy's Young Ophthalmologist (YO) Committee chair, Purnima Patel, MD, joined members of her committee to present the Academy's 2016 EnergEYES award to Jean E. Ramsey, MD, MPH. "We are so honored to have the opportunity to present this award to someone as inspiring as Dr. Ramsey. She has mentored so many young ophthalmologists and has always supported us by serving as a strong role model. She has been critical to the success of our profession and is an inspiration to all of us. The YO Committee recognizes Dr. Ramsey's lifelong contributions and commitment to patients and to improving the careers and opportunities for future eye surgeons".

The Academy's Energ-EYES Award was created in 2009 by the YO committee to annually recognize and honor an ophthal-mologist who demonstrates exemplary leadership and mentoring skills

that energize others to be involved and to improve ophthalmology. Dr. Ramsey follows in the footsteps of

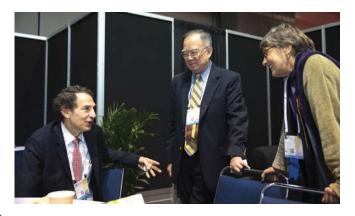
> previous distinguished recipients, Michael W. Brennan, MD: William C. Lloyd, III, MD; H. Dunbar Hoskins Jr., MD; Susan H. Day, MD; David W. Parke, MD; Bruce E. Spivey, MD; and Stanley M. Truhlsen, MD.

Symposia

The SO committee sponsored two symposia at AAO 2016. Committee chair Susan Day, MD led an important discussion on how the geriatric population will play a role in the patient engagement movement as patient satisfaction and outcomes moves increasingly to the forefront.

Continuing its tradition of partnering with the Academy's Committee on Aging on symposia topics, the SO Committee joined the COA in offering a discussion of meaningful opportunities to contribute and serve overseas by providing clinical care in underserved areas, teaching surgical techniques, vision rehabilitation, and resident education.

Senior Ophthalmologist Lounge



The SO Lounge turned out to be a great benefit for SO members who attended AAO 2016. The SO Lounge accommodated 1500 visitors who enjoyed conversations with colleagues, viewed the photo archive loop and took part in practice management roundtable discussions with four experts who provided financial planning and practice transition tips. We thank everyone who stopped by over the course of the meeting and took advantage of this relaxing and comfortable environment.

Stay tuned for what the SO Committee has in store for you at AAO 2017 in New Orleans.

Academy Foundation Update

Christie L. Morse, MD, Chair, Foundation Advisory Board

hope 2016 was as rewarding for you as it was for the Foundation! We've been working hard to reach out to members and the ophthalmic community to raise more support for the Academy programs that benefit us all. I loved meeting so many of you at AAO 2016 in Chicago. Thank you for joining us at our donor reception or stopping me for a quick hello. Here are a few highlights from recent months.

Truhlsens Donate \$500,000 to Support Ophthalmic Education



Stanley and Dorothy Truhlsen

The Foundation is truly grateful to longtime supporters and Visionary Society members Stanley M. Truhlsen, MD, and his wife, Dottie, for making a generous \$500,000 pledge to support ophthalmic education. The Dr. Stanley and Dorothy Truhlsen Simulation **Education Initiative Endowment** Fund will support state-of-the-art simulation and interactive learning technology on the Ophthalmic News and Education (ONE®) Network. The fund will undoubtedly advance physician education and transform patient care worldwide.

ONE Network Phase II Campaign is Complete

Through the generosity of industry, foundations and individual donors, the Foundation reached its fundraising goal of \$10 million to complete the second major phase of ONE Network development. This will provide ONE Network access to more ophthalmologists globally, ensuring they have the educational tools to improve care and enable patients to live full, healthy lives. But there's still more to do to keep this extremely valuable resource going, and the ONE Network remains a priority for the Foundation. For information on naming opportunities or to make a gift, email me at cmorse@aao.org.

Orbital Gala Raises More Than \$190,000

Thank you to those who attended the 13th annual Orbital Gala in Chicago. More than 400 guests took a "Walk on the Wild Side" at the Field Museum and viewed exhibits, posed for photos with Sue the T. rex, and enjoyed a delicious buffet dinner and dancing. The silent auction, open for the first time to all U.S. members, was our most successful to date, generating bidding wars on ophthalmic equipment, sports

tickets, jewelry, wine and spirits.

The true highlight of the evening was honoring the incomparable Richard P. Mills, MD, MPH. In recognition of Dick's 30+ years of service to the Academy, the Foundation announced a travel stipend in his honor for a deserving resident to attend AAO 2017 in New Orleans. It's a fitting way to acknowledge Dick's commitment to educating the next generation of ophthalmologists.

Establish Your Legacy with a Planned Gift

Education is and always will be of profound importance to our profession. And for many of us, being a physician is much more than a career – it's our life's work. Including the Academy in your will or trust will allow you to continue this work, improving the lives of future generations of ophthalmologists and their patients. And it's a great way for you and your loved ones to reap significant tax benefits! Keep an eye out for a mailing next month with more information.

Have a healthy, happy 2017. I always welcome questions or feedback from you. Please feel free to drop me a line any time at cmorse@aao.org.

(I - r) Foundation Advisory Board President Tony McClellan; Foundation Advisory Board Chair Christie L. Morse, MD; Academy CEO David W. Parke II, MD; 2016 Orbital Gala honoree Richard P. Mills, MD, MPH; and Orbital Gala Chairs Ruth D. Williams, MD, and Stephen C. Gieser, MD, MPH





As I Remember it

A Haunting Diagnosis

George H. Kurz, M.D.

ne morning in the late 1950s, after examining a patient with a tumor in the back of his eye, Dr. Harold Scheie looked pensive. When the patient had left the room, he turned to us residents with a story I imagine none of us ever forgot. "I had a woman in her fifties, a nurse, who came to the office one day," he began, "and she didn't let on why she was

there except that the vision was poor in her left eye. She turned out to have a mass under the retina in that eye. When I finished the exam, I said to her, 'How has your general

"I knew it!" she snapped.

health been?'

"What do you mean you knew it? What did you know?" I asked her. "Well, I had a mastectomy for breast cancer four years ago," she told me, "and as soon as you asked me about my general health, I knew the cancer had spread to the eye."

"The sad thing is that she was absolutely right," the professor continued. "She thought I had made the diagnosis, but she had already made her own diagnosis, a metastasis to the eye."

"After that, we were friends," Dr. Scheie went on. "She would

send me Christmas cards reminding me of that visit in the office. The strange thing is, after she died. I still kept getting Christmas cards from her

for several years. She must have written a bunch of cards.

addressed them to me, and given them to a friend to mail each year."

SCOPE

The Senior Ophthalmologist Newsletter

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