



# SCOPE

## Bernard Becker, MD: The Smartest Person I Ever Knew

George Bohigian, MD

**D**uring my second year of ophthalmology residency (1967-68) at Washington University in St. Louis, I was working on a paper and needed a reference for some research I was doing.

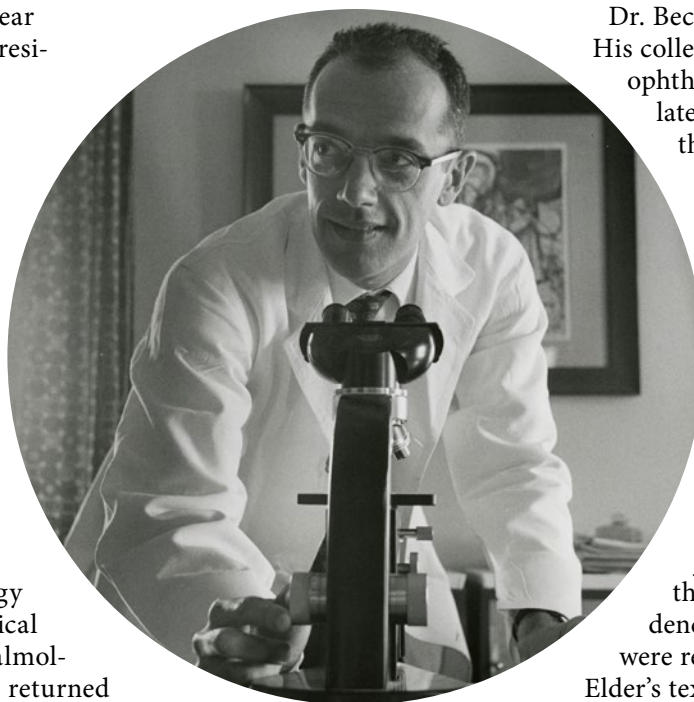
Prior to PubMed, one had to go to the library and manually search the literature. I asked Bernard Becker, MD, the chair of the department and my mentor for any leads, "George," he said, "I think it is in the Archives of Ophthalmology (Graefe's Archive for Clinical and Experimental Ophthalmology) April or May 1957." I returned to the library and there it was! He had also said it was written in German; it indeed was in German. His knowledge was encyclopedic, and his memory photographic.

By the age of 3, Bernard Becker could read and do math — long division and multiplication in his head. He was astonished the other children could not do the same. He was so far advanced in elementary school that he received a double promotion in grade, and from that point he was always the youngest in his class, but still ranked No. 1 academically in high school, uni-

versity, and medical school and residency. At the age of 17, he entered Princeton University on a full tuition scholarship, but lacking money for food and books, he tutored fellow students to earn the necessary money.

Albert Einstein asked him to tutor his nephew. After Princeton, Dr. Becker attended Harvard Medical School and, for residency, Johns Hopkins Wilmer Institute. At the end of his third year of residency, he married Janet, who remained his wife for

63 years, until his death. He was interested in biochemistry and research, but he also served in the US Army as a psychiatrist.



Dr. Becker loved old eye books. His collection of antiquarian ophthalmology books would later become the basis of the rare book collection at Washington University Becker library, one of the outstanding collections of its kind. In 1953 he was recruited as full-time chair of the department of ophthalmology, becoming the youngest chair at Washington University School of Medicine. When he joined the department, there was no formal residency training. The residents were required to read Duke-Elder's textbook and examine the patients primarily with a pen light. He faced many challenges in building the department but overcame them to make it one of the finest in the country. Many of his students, residents and junior faculty are in leadership positions nationally.

Dr. Becker ran a tight daily schedule. In the morning he would read. He enjoyed his daily iced coffee and loved to swim in his home's indoor pool, then come to the department in the afternoon and do administrative work. Friday afternoon eye rounds were a delight. He was able to get to

## Bernard Becker, MD

the center of a clinical problem by asking the correct question, simultaneously making a teaching point. He also enjoyed playing poker with the staff. He could remember which cards had been played and calculate probabilities on the spot and was known to win big at these games. It was reported he read 100 journals a month. Once he read in a poultry industrial journal that chickens raised in the dark developed glaucoma and tried to use this as an animal model, but unsuccessfully. He developed techniques for diagnosing glaucoma and measuring rates of aqueous humor.

Dr. Becker and his wife were community leaders in integration and housing for the poor. At that time, there were wards that housed black and white people separately at the hospital. He was instrumental in making a black ward air-conditioned. Soon many patients in the white ward wanted

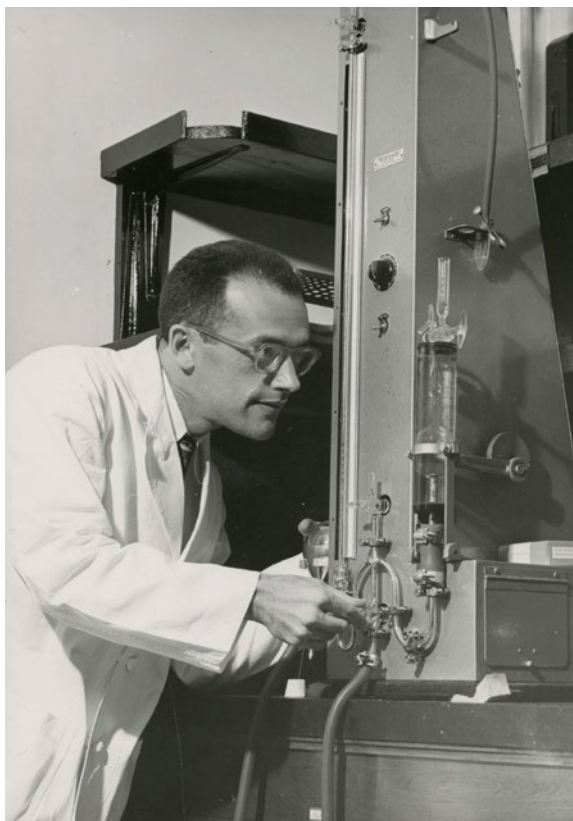
to be admitted to the black ward in the hot summers in St. Louis.

Dr. Becker encouraged residents to do research in addition to clinical work. He helped establish the Association of University Professors of Ophthalmology, Association for Research in Vision and Ophthalmology, Research to Prevent Blindness and the American Board of Ophthalmology. Dr. Becker and his wife were also generous benefactors to philanthropic organizations.

I would visit at his office or home after he retired. I asked him one day, what would he answer if one of his children asked what principle or rule to live by? I often ask this question and most respond with the “golden rule.” Dr. Becker said “to give” – one of

the principles of Judaism. I also asked him about the source of his philanthropic funding. It was his private investments, picking the right stocks and bonds based on his reading of articles and of the mood of the country’s economy. I asked him yet another time: How to do you measure success in life? “You can tell your success in life by your offspring.” He meant his children and his students – I was one among the many and most fortunate to be so.

The oral history of Bernard Becker, MD is available at <http://beckerexhibits.wustl.edu/oral/transcripts/becker.html>.



## From the Editor's Desk



### An Optical Delusion

M. Bruce Shields, MD

“A human being is a part of the whole, called by us ‘universe,’ a part limited in time and space. He experiences himself, his thoughts and feelings as something separate from the rest – a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole nature in its beauty. Nobody is able to achieve this completely, but striving for such achievement is in itself a part of the liberation and a foundation for inner security.”

Some of you may recognize the above passage as a quote from Albert Einstein in a letter he wrote in 1950 to an ordained rabbi, Norman Salit, who was seeking in vain to comfort his 19-year-old daughter over the death of her 16-year-old sister. In addition to his lifetime attempt to unify into a single, comprehensive theory the laws governing gravity and electromagnetism, his voluminous correspondences reflect a deep conviction that such a unity must exist throughout nature.

Although it was written nearly 70 years ago when Einstein was 70, the “optical delusion” that we are each separate individuals without unity to all humankind and to our environment seems as apropos today as ever before. At a time when the world appears to be continually shrinking through advances in travel, communication and shared technology, there seems to be a paradoxical increase toward division and isolationism in areas of politics, nationalism, ideologies, race, religion and lifestyles, as well as a lack of consensus on protecting the world in which we live and all its creatures.

Having reached the status of “seniors,” you and I have witnessed repeatedly the tragedy of the optical delusion, when individuals, various groups and even nations place their personal welfare and interests above that of the larger, global society. The result can be anything from estrangement within families to a threat to world peace and even to the existence of our world. And yet the solution has always been right in front of us: to free ourselves, as Einstein suggests, from the prison of this delusion by recognizing that we are not islands, but that we all share a common bond with each other and with this planet we call home.

Like many of you, I have enjoyed the opportunity that retirement provides to travel in various parts of the world and to do so in a more

leisurely manner than during the professional years, with more time to talk with people and to reflect. One of the things that has impressed me most during these sojourns is that the vast majority of people in other parts of the world, even though they may not agree with our government’s international policies, seem to like Americans as individuals and, like ourselves, yearn simply for peace and unity with each other and with our shared environment. And that is reason for hope.

So what can we as seniors do to help free future generations from Einstein’s optical delusion and its undesired consequences?

I suppose we can begin by sharing the lessons of our lifetime of experience: of the pain that we have seen individuals, groups and nations suffer when we see ourselves as isolated from the world community and insist on always putting our personal interests before the common good. But one thing we have learned as parents and teachers is that younger generations pay far more attention to what we do than what we say. In whatever time we have left, maybe we can spend it trying to see ourselves as part of the whole, being less judgmental of those with whom we have differing views, more willing to work together for common goals at home and abroad and more sensitive to the delicate needs of all creatures and of this planet we all share.



## Gregory P. Kwasny, MD, Master of Sight, Flight and Wood

M. Bruce Shields, MD

**L**ike many of you, I suspect, I have enjoyed over the years watching the public television programs, “This Old House” and “The New Yankee Workshop.”

As I watched these master craftsmen at work, I fantasized of one day creating such fine pieces in my own woodwork shop, but like so many dreams, my little shop sits quietly

unused on most days. One of our colleagues, however, saw the shows, had the inspiration and acted on it in a big way. But that is only one facet of the full life of Dr. Gregory P. Kwasny.

Dr. Kwasny was in solo practice for almost 40 years in Milwaukee, where he also taught ophthalmology residents at the Medical College of Wisconsin as a Clinical Professor. In addi-

Dr. Kwasny with his completed Secretary of butternut (also called white walnut).



tion, he has been active in the American Academy of Ophthalmology, serving as Secretary for Federal Affairs and as a member of the Health Policy Committee. More recently, he has represented the Academy on the American Medical Association Relative Value Update Committee. He was the recipient of the [Academy's Outstanding Advocate Award](#) in 2017, along with many other local and national honors.

After “retiring” from his practice in 2012, he and his wife moved to St. Louis to be near two of their children and six grandchildren. But his passion for ophthalmology prevailed, and he went back to part-time practice until a retinal detachment in 2015 caused him to retire from ophthalmology again.

Throughout his career, Dr. Kwasny explored many other pleasures of life, in addition to enjoying his family. In fact, it was during medical school that he became active in aviation, an interest that he continued to pursue until recently. Fortunately, the visual outcome of his retinal detachment surgery (a buckle, three vitrectomies and cataract extraction) was

## Gregory P. Kwasny, MD

good, and he has returned to flying for Wings of Hope, a nonprofit organization that flies patients to and from medical care in St. Louis.

It was actually at his wife's suggestion that he find a hobby that did not involve flying that caused Dr. Kwasny to begin watching some fix-it TV programs. Inspired by what he saw, he bought some tools and signed up for a couple of woodworking classes at a local hardware store. One thing led to another, and he began taking on more challenging projects. Soon he was making furniture for friends and family and a few



custom projects for an interior design friend. He uses mostly domestic, locally available wood, which in the Midwest is primarily maple, walnut, butternut and some mahogany, with more exotic woods for detail work. For his cabinetry he uses a lot of veneer plywood, because it is more stable, lighter and stronger than hardwood and can be obtained with one side factory finished. A look at some of his work in the pictures on these pages speaks louder than words about the quality of his craftsmanship.

Dr. Kwasny did not forget about his ophthalmic heritage as he pursued his interest in



Dr. Kwasny in his shop carving the front of a French chest.

woodwork. At one point, he suggested to the Academy Public Relations Committee that Norm Abram, of "This Old House" and "The New Yankee Workshop" be given an award for promoting eye safety on their programs. The Academy did this in 2007, and it became the precursor for the Academy's EyeSmart program.

It has been about 18 years since Dr. Kwasny started woodworking, and today he spends three to four days a week in his workshop. His is an example of how other interests blend so well with a career in ophthalmology and how "retirement" from our practice does not have to mean the end of a productive and interesting life.

Completed French chest made of butternut.



## Eliot Berson: A Pioneer in the Study and Treatment of Retinal Degenerations

Frank G. Berson, MD

**M**y brother Eliot grew up in Chelsea, Mass., where our father, H. Arthur Berson, MD, was a well-respected pediatrician. Dad was a skilled clinician and teacher who inspired both of his sons to pursue a career in medicine.

Although Eliot had done well in the Chelsea public schools, he decided as a junior in high school that transferring to a private school would increase his chances for acceptance at a better college and, by extension, medical school as well. He persuaded our parents to let him apply to Phillips Academy Andover for senior year. At first, he was admitted on the condition that he repeat his junior year in order to “catch up” with his classmates. Eliot, aged 16, argued that he did not have the time to give Andover two years, considering the many years of medical training ahead. The director of admissions relented and allowed Eliot to attend Andover for one year, letting him graduate with the Class of 1954.

Eliot’s characteristics of intelligence, determination, and resiliency were no more evident than on the tennis court. At Camp Wigwam for Boys in South Waterford, Maine, he was undefeated in intercamp competition, driving opponents to distraction by his ability to return everything and wait patiently for an unforced error. In one famous match during Color War, he persuaded his faltering doubles partner to leave the court, concluding correctly that his chance of winning was greater playing one against two.

His academic success at Andover was followed by even greater accomplishments at Yale College. Majoring in zoology, he was first in his class sophomore year, admitted to Sigma Xi and junior Phi Beta Kappa, and graduated summa cum laude. This propelled him to Harvard Medical School, where he developed an interest in visual science. After internship at the University of California, San Francisco, he completed residency training in St. Louis at Barnes and



Eliot Berson, MD

McMillan under Dr. Bernard Becker. There he published his first original paper, *Treatment of Experimental Fungal Keratitis* and grew into an exceptional clinical ophthalmologist.

From 1966 to 1968, Eliot served as a clinical associate in the ophthalmology branch of the National Institute of Neurological Diseases and Blindness, predecessor to the National Eye Institute. The chief, Dr. Ludwig von Sallmann, was a man whom Eliot greatly admired. In later years, lamenting on a certain informality that had pervaded academic medicine, Eliot would comment that “when Dr. von Sallmann entered the room, everyone stood up”. Eliot had the unusual opportunity to participate in “Project 710” in which hundreds of patients with retinal degenerations as well as family members were referred to the NIH for evaluation. Working with Peter Gouras and Ralph Gunkel, Eliot became an expert in clinical electroretinography.

Eliot was recruited to join the Harvard Department of Ophthalmology in 1968. He initially established an electroretinography service at Children’s Hospital

Dr. Eliot and Kyra Berson



## Eliot Berson, MD

but then relocated to the Mass. Eye and Ear infirmary within two years. The electroretinogram (ERG) service quickly became a major referral center. Bolstered by the philanthropic efforts of Bernard Berman of Baltimore and Gordon Gund in Princeton, N.J., a commitment was made to raise \$675,000 for retinitis pigmentosa research and to secure 2,500 square feet of space within the newly constructed infirmary for a laboratory to study retinal degenerations.

Not everyone at the Infirmary embraced this project. Eliot was viewed by some as a brash outsider who should not be in a position to control research funds outside of the long-established Howe laboratory. Nevertheless, the Berman-Gund Laboratory for the Study of Retinal Degenerations was dedicated in 1974. Eliot's vision of a multidisciplinary laboratory at Harvard to find a treatment for retinitis pigmentosa (RP) had become a reality. Animosity toward the project and Eliot would soon fade with time and attrition. Eliot would direct the laboratory for nearly 40 years.

Eliot received his first research grant from the National Eye Institute in 1969, and that funding would continue uninterrupted for 39 years. He also served as principal investigator of the Retinitis Pigmentosa Center grant and received support from the Foundation Fighting Blindness for a similar duration. His initial research efforts concentrated on the characteristics of the early receptor potential in hereditary retinal degenerations, application of full-field electroretinography in diagnosing various forms of RP and quantifying progression and the impact of nutritional deficiencies in animal models. He became convinced with regard to the potential value



Dr. Frank and Dr. Eliot Berson

of vitamin A in the treatment of retinitis pigmentosa, despite contrary opinions by others.

In 1984 he was awarded funding by the NEI to serve as principal investigator of a randomized clinical trial which would demonstrate by 1993 that 15,000 IU of vitamin A palmitate was a proven and effective treatment which slowed disease progression. Subsequent studies demonstrated the additional benefit of docosahexaenoic acid and lutein as supplements to vitamin A palmitate treatment.

For a Mass. Eye and Ear resident rotating through the ERG service, the experience was memorable, to which I can personally attest. Patients from just about everywhere would wait endlessly to see Eliot after testing. Many of them had been told there was no treatment for their inevitable blindness. For some patients there was the exhilarating news that, in fact, they did not have a progressive disease (or had not inherited it) based on their ERG. For others, there was the prospect of an extended lifetime of useful vision, thanks to a proven treatment.

Eliot was a methodical examiner and skilled refractionist.

Although he relied heavily on the ERG ("I really only perform ophthalmoscopy as a courtesy to the patient" he would quip at Grand Rounds), he demonstrated that some patients would often benefit from a correct refraction and "a decent pair of glasses". There was the infamous written exam for residents required to pass the rotation, although the only penalty for failure was to retake the exam. Eliot knew that the questions had probably circulated among the residents, but he never changed them. Rather, it was his way of encouraging residents to read and study.

The year 1982 was a particularly important year for Eliot. He was appointed the first incumbent of the William F. Chatlos Professorship in Ophthalmology at Harvard Medical School, a chair he would hold for the remainder of his life. After a protracted courtship, he married Kyra Kaplan, who had grown up in New Hampshire and graduated from Brandeis University. Kyra was unequivocally committed to supporting Eliot's career, which included work hours extending well into evenings and weekends. Throughout their 35 years of marriage, they traveled the world and enjoyed summers on the Maine coast.

## Eliot Berson, MD

Eliot realized the importance of identifying genes responsible for retinitis pigmentosa and allied conditions. Beginning with the discovery of mutations within the rhodopsin gene in patients with autosomal dominant RP, he reported on many other mutations, including the RPE65 gene in autosomal recessive RP and mutations found in Leber congenital amaurosis, X-linked and recessive RP, Stargardt macular degeneration and Usher syndrome II.

Eliot collaborated with many scientists in this effort, most notably Ted Dryja, with whom he co-authored more than 80 papers, and Carlo Rivolta of Lausanne, Switzerland. This work was integral to setting the stage for 21st-century gene therapy.

In total Eliot published 248 original papers in addition to 36 reviews. There were numerous other individuals who collaborated with Eliot, including Bruce Goldstein, K.C. Hayes and Bernard Rosner. Susan Schmidt

and Michael Sandberg were early recruits to the Berman-Gund Lab. Michael, in particular, worked with Eliot for over 40 years. Eliot also recognized the importance of working with outstanding clinicians. Robert Brockhurst saw patients for years in the ERG Service, and Alexander Gaudio volunteered a day each week away from his vitreo-retinal practice in Connecticut to work with Eliot over the course of three decades.

Eliot was the recipient of numerous awards and honors during his career. They included the Alcon Research Institute Award (1988 and 1997), Francheschetti Award, International Society for Genetic Eye Diseases (1990), Taylor Smith Medal, New England Ophthalmological Society (1991), Friedenwald Award, Association for Research in Vision and Ophthalmology (1992), New York Lighthouse Pisart Vision Award (1993), Distinguished Alumni Award, Department of Ophthalmology, Washington University School of Medicine (1999), Llura Liggett Gund Award, Foundation Fight-

ing Blindness (1999), Ludwig von Sallmann Prize, International Congress of Eye Research (2006), Award of Merit in Retina Research, Retina Society (2010), Foundation Fighting Blindness Visionary Award (2012), and Distinguished Clinical Achievement Award, Harvard Medical School, Department of Ophthalmology (2013).

Eliot's final three years were challenging. He was abruptly forced to relinquish his clinical and administrative responsibilities, and although he continued to collaborate with colleagues and publish, he felt unable to advance his mission in a significant way. On March 19, 2017, at the age of 79, he suffered a myocardial infarction at home and succumbed to cardiac arrest.

Eliot Berson will be remembered as a kind and gentle man of exceptional intelligence and determination who advanced the field of hereditary retinal degenerations and helped countless patients with these afflictions. Just as importantly, he was a devoted son, husband and brother who is sorely missed.

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## Introducing the Truhlsen-Marmor Museum of the Eye

Jenny Benjamin, Director, Museum of the Eye

**F**ew subjects are relevant to everyone. Vision is one of them. Sight is one of the core ways we experience the world — and, according to most people, the most valued of the five senses. Vision matters a great deal to people of every age and from every background.

Now we have a chance to build a permanent home to explore it.

San Francisco is home to the American Academy of Oph-

thalmology, the world's largest association of eye physicians and surgeons and the leader in ophthalmic education. Until now, the 38,000 ophthalmic artifacts

Ivory spectacle case, c1615. Harriet and J. William Rosenthal Collection



*“The new Museum of the Eye will be the first of its kind where the public can go to learn about sight, to see it, to touch it.”*

*— David W. Parke II, MD, CEO, American Academy of Ophthalmology*

in the collection of the Academy Foundation have only been accessible online or by appointment.

The new Truhlsen-Marmor Museum of the Eye will change that.

We are building a dedicated

## The Museum of the Eye

space in San Francisco for the existing collection and new exhibits. The Museum of the Eye will be a free, public museum and education center, introducing the world to the science of sight — and to the field of ophthalmology dedicated to protecting it.

Awe makes experiences more memorable and impactful — which gives the new museum an opportunity to save sight.



Anatomical model, 1900-1930.  
Gift of John Shoch in memory of  
David Shoch, MD

Visitors will come away from the Museum the Eye amazed by what their eyes can do, and as a result, the museum will do more than educate and entertain its visitors. In this one-of-a-kind, immersive environment, our guests will experience how the science and profession of ophthalmology influence our daily

Ex-voto, 19th Century. Harriet and  
J. William Rosenthal Collection



life. They will see the evolution of eye care through the ages, learn about the latest innovations saving sight today, and develop an interest in the study of medicine and ophthalmology.

The museum will carry on the core mission of ophthalmologists everywhere: protecting sight and empowering lives.

Construction has begun, thanks to Drs. Truhlsen and Marmor and our many donors.

designs are coming together for four galleries: Introduction to Eye Anatomy and Function; Perception; Breakthroughs in the Understanding and Treatment of Eyes; and New Frontiers in Research and Innovation.

As a private practitioner, university educator and recipient of the prestigious Lucien Howe Medal for ophthalmic service, Stanley M. Truhlsen, MD, represents the luminaries that the Museum of the Eye will honor. “I

*“On behalf of the City and County of San Francisco, I congratulate the Academy for bringing the Museum of the Eye to Fisherman’s Wharf. This new center will welcome visitors from all around the world, and will provide unique, interactive opportunities to learn about the science and history of our most treasured sense — our vision. I wish the Academy the greatest success!”*

*— London N. Breed, Mayor, San Francisco*

With the transformational gifts of Stanley M. Truhlsen, MD, and Michael F. Marmor, MD, as well as leadership gifts and corporate sponsorships, we are three-quarters of the way to our final fundraising goal of \$12 million. The Academy has begun construction of the permanent home for the new museum, and

support the Museum of the Eye because of its many programs to preserve the history of ophthalmology and the Academy. The museum puts all these materials at your fingertips. It’s a marvelous thing,” says Dr. Truhlsen. “The museum is the vehicle by which our heritage remains both relevant and inspiring, promot-

## The Museum of the Eye

ing continued discovery and advancement.” His significant donation has paved the way for the museum’s new, dedicated space.



Stanley M. Truhlsen, MD

A professor and former chair of ophthalmology at Stanford University, Michael F. Marmor, MD, provides interdisciplinary education yearly at the Academy’s annual meeting. “If we can educate the public about the eye,” said Dr. Marmor, “then we’ve done something good. The

Truhlsen-Marmor Museum of the Eye provides a unique opportunity to show people that science is fun and that there is an historical basis for the fascinating field of ophthalmology.

I am honored to be a champion of this exciting endeavor.” His donation will help lay the groundwork for our new, interactive museum.

In our first year alone, we anticipate welcoming more than 30,000 visitors to the world’s only cost-free, public museum devoted



Michael F. Marmor, MD

to the exploration of sight and the profession of ophthalmology. We have made great progress toward a preview event during AAO 2019 in San Francisco and a grand opening for the public in early 2020 — and we have you to thank!

Join us in building the Museum of the Eye. For more information, please contact the Foundation’s executive director, executive director Tina McGovern at [tmcgovern@aao.org](mailto:tmcgovern@aao.org) or +1 415.561.8508.

## What We’re Reading This Summer 2019

Book Review Editor, Thomas S. Harbin, MD, MBA

Senior ophthalmologists share the best of what they’re reading this Summer. Share what you’re reading and send your review to [scope@aao.org](mailto:scope@aao.org).

***The Fabric of the Cosmos: Space, Time and the Texture of Reality***  
By Brian Greene

Reviewed by Alfredo A. Sadun, MD, PhD

It’s not often that you get to read a book that is written by one of the world’s leading physicists AND, a Pulitzer Prize finalist. The man can write.

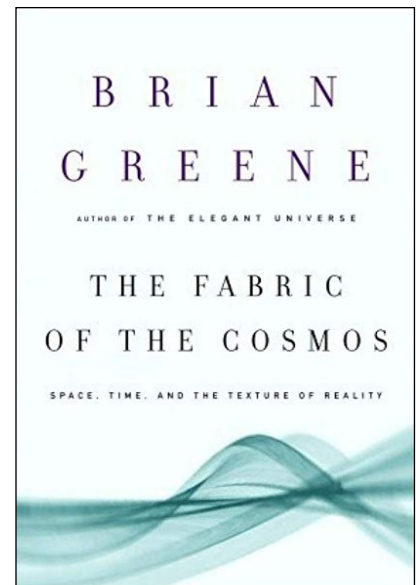
Greene proved this when he wrote “The Elegant Universe,” and with the latter book, I expected a more modern version of the same. Instead, Greene took the subject matter to a new and deeper level. I divide this book into three sections. The first takes a very fundamental point of view and asks how many dimensions are there. Three was the traditional answer and then, after Albert Einstein gave us special and then general relativity, we

went to a paradigm with a four-dimensional space-time universe.

The middle third of the book is about quantum mechanics and tries to reconcile it with the newer ideas brought about by both special and general relativity. Finally, the last third explains how string theory with its 11 dimensions, may have bumbled into the answer.

As I feared, some parts were quite technical. But they were interspersed with a great number of easily accessible analogies. That surprised me, for the world of the very small (quantum mechanics) and that of the very large (relativity) don’t lend themselves to real world analogies. We, as humans, live on a planet of medium sized things under the influence of mild gravity and with objects that move pretty slowly.

So, in our world, simple Newtonian mechanics suffices. More to the point, we evolved in this world where natural selection favored a brain and intuition that modeled and predicted events that only exist in nonquantum, nonrelativity



worlds. Yet, Greene somehow makes the analogies work for our primate minds. Greene uses a lot of line drawings that maintain the accuracy but then explains the concepts with clear narration. And the philosophers in our audience will love that he begins the book with Camus’ “The Myth of Sisyphus,” to reassure the reader that this is a story that relates to the human condition.

Particularly daunting are ideas about slicing the many dimensions with respect to time. Time may be a fourth dimension, but it certainly differs fundamentally

## What We're Reading

from the other 3 spatial dimensions. For one thing, you can move back and forth through any of the three spatial dimensions, but only forward in time.

Greene, like many others, attributes the arrow of time to entropy. But entropy, or statistical mechanics, can only be understood in the context of many things that can go from order to disorder. Entropy is not about a singular thing; it's about the more probable arrangement of many things. The implication is that time too must exist only in the context of many things (particles or energy) and their relationship. The book finishes in Greene's wheelhouse: string theory. And here, I must admit, he started to lose me. This is a book for the layman with a strong interest in physics and the cosmos we live in. If you only get through 80%, you'll still achieve the dual satisfactions of fulfilling your intellectual curiosity and addressing a philosophical need. And you'll probably pass the final.

### ***Let's Play Two: The Life and Times of Ernie Banks***

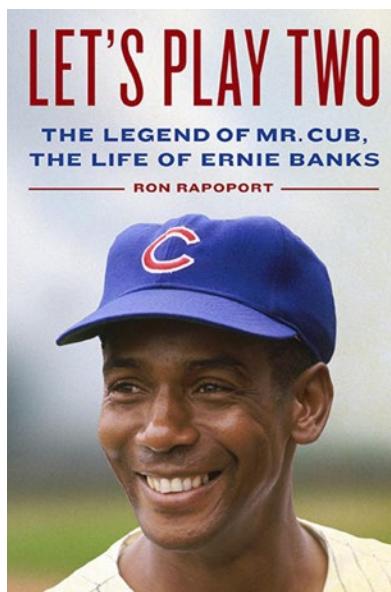
By Doug Wilson, MD

Reviewed by J. Kemper Campbell, MD

For more than 60 years, Ernie Banks was the face of the Chicago Cubs franchise. In fact, during many years he was the only reason to watch the abysmal Cubs team perform. Banks was a first-ballot choice for the Baseball Hall of Fame in 1977, having played his entire 18-year career as a Cub without participating in a single post-season game.

Famously upbeat, he became an ambassador for both Chicago and baseball. Ironically, he died in 2015, the year before the Cubs broke their infamous 108-year World Series curse.

Experienced baseball biographer, Doug Wilson, MD, practicing ophthalmologist, is like one of those dependable relief pitchers with two



unhittable pitches and excellent control. He chooses interesting personalities such as Mark Fidrych, Brooks Robinson and Carleton Fisk for his biographies and researches his subjects extensively. His writing is also enlivened by an occasional surprise knuckleball of subtle humor.

Befitting his status as a former player, Wilson does not dwell upon the foibles inevitably found in many sports icons. In Banks' case, his four failed marriages are mentioned only peripherally. Instead, Wilson concentrates on anecdotes from Ernie's hardscrabble childhood in segregated Dallas and later with the Kansas City Monarchs.

The author delights in sharing arcane tidbits such as revealing Banks is one of only three individuals in the Baseball Hall of Fame who also scored baskets while playing for the Harlem Globetrotters. The other two are Ferguson Jenkins and Bob Gibson. Readers will learn that Banks is the only player in the Hall of Fame to go directly from playing in the Negro Leagues into the majors.

Particularly relevant to understanding Banks' character is the portion of the book dealing with the relationship between the ever-positive "Mr. Cub" and his notoriously toxic manager, Leo Durocher, who never met a man he didn't dislike.

Author Wilson postulates that Banks used his unflinchingly cheerful, friendly and optimistic outlook on life as a protective shield to combat the effect of his unfamiliar Northern surroundings upon a Jim Crow-raised Southerner.

Regardless of his reason for adopting this sunny attitude, by the book's end the reader will be convinced that the façade ultimately became his true personality. Any reader wishing to spend a pleasant interlude in the company of one of baseball's genuine "nice guys" should pick up this book.

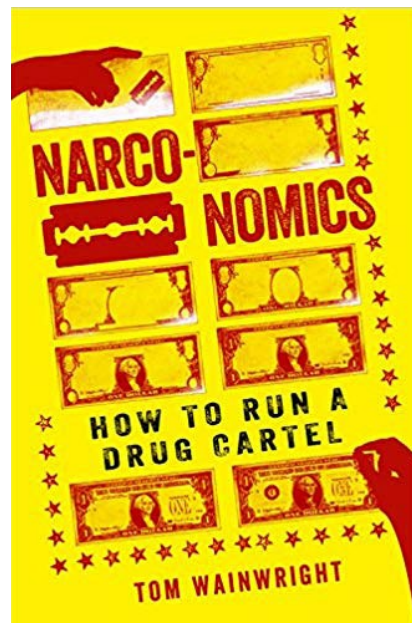
### ***Narconomics***

By Tom Wainwright

Reviewed by Thomas S. Harbin, MD

The epidemic of opioid abuse consumes the headlines seemingly daily and one aspect of the problem was recently reviewed in *Scope's* Spring issue.

The current headlines emphasize the role physicians and dentists have played in causing patients to become addicted. Fortunately, few ophthalmologists encountered patients with pain so significant that opioids needed to be given, and now we all know the danger of prescribing them.



## What We're Reading

Yet illegal drugs, from marijuana (still not legal in many states) to cocaine to heroin, remain a huge problem in this country. Many of the deaths from overdoses come from illegal drugs containing lethal amounts of fentanyl. That's where this book comes in.

Narconomics looks at the big picture of drug cartels and how illegal drugs enter our country and their distribution. Wainwright analyzes cartels from a business perspective. The total drug trade in 2016 was worth \$300 billion, big enough to make it one of the top 40 countries in the world. Cartels face the same problems as any business with personnel, competition, sourcing material, distribution of product plus the added problem of being illegal. The author looks at each of these business issues from the viewpoint of a gang leader. This in itself is interesting.

Just as interesting is the discussion of the business aspects of stopping this problem. Throughout, the book details the efforts of our country and the Latin American countries to stamp out this scourge. The author makes the point that the strategy of destroying drugs at the source in the various countries that grow the plants has not worked and will not work.

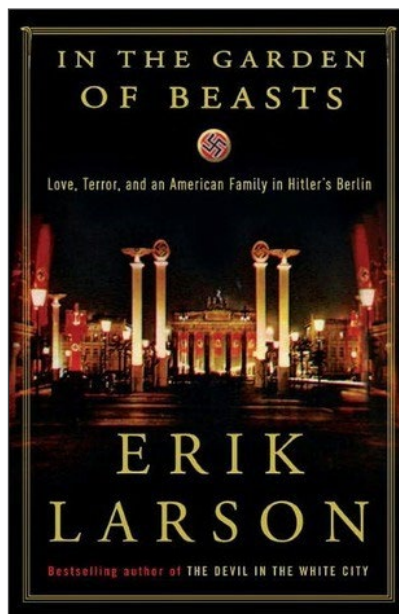
The markup in price is so high that any loss of basic material will not affect the ultimate sales price. He makes the point that prohibition has not worked and then discusses the results of the few states and countries that have legalized drugs. This book will make you think that our country needs a new direction in dealing with this deadly problem.

### ***In the Garden of Beasts***

By Erik Larson, MD

Reviewed by Samuel Masket, MD

Those familiar with Erik Larson's



writings ("Devil in the White City," "Dead Wake," and others) have come to appreciate and to learn from his intense historical research. Not long ago I had the privilege of seeing him interviewed in LA and came to know that he does all of the research personally.

That news ruined a personal fantasy that one day I might fully retire and work with him as a research assistant. Nevertheless, his skills are very apparent in this book that relates the remarkable story of William Dodd and his family after Dodd was appointed by President Franklin D. Roosevelt as ambassador to Germany in 1933, the very early days of Hitler's regime.

William Dodd was a professor of history at the University of Chicago when appointed to that position. He was reluctant to leave the university, and there was some question as to whether his appointment was actually made in error. Nevertheless, Dodd moved to Berlin with his family in 1933. His family included his wife and two children.

The younger, daughter Martha, was to become a central figure in the book. She was attractive, adventurous, impressionable, liberated and came to know many of the German leaders personally. In an early scene, she was introduced to

Hitler at the famed Hotel Adlon. There, the cocktail and afternoon tea lounge was known as a favorite respite for the Nazi hierarchy. Later she became heavily involved in an affair with a Soviet attaché.

Ambassador Dodd was unprepared for and astonished to learn firsthand of Nazi atrocities, the depth of anti-Semitism and the brutal tactics of the storm troopers. Though he tried to warn Roosevelt and the U.S. State Department of the tragic realities and ambitions of the Nazis, his reports essentially fell on deaf ears. Dodd failed to enlist help from the isolationist State Department and left Germany shortly before the invasion of Poland signaled the first strike of World War II.

The book is markedly educational and fascinating. Some fear that 1933 Germany could presage current events. As such, the book makes for important reading, not just entertainment.

### ***In the Hurricane's Eye: The Genius of George Washington and the Victory at Yorktown***

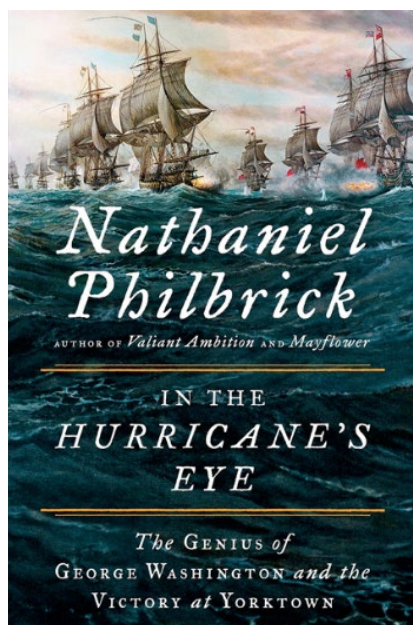
By Nathaniel Philbrick

Reviewed by M. Bruce Shields, MD

Nathaniel Philbrick is among the outstanding historians and biographers of our generation who have kept the story of our nation alive.

Philbrick's previous 11 books have spanned our history, from "Mayflower: A Story of Courage, Community and War," which I particularly enjoyed, to "The Last Stand: Custer, Sitting Bull and the Battle of Little Bighorn." In his most recent book, "In the Hurricane's Eye," Philbrick reminds us of how close the American experiment came to never getting off the ground. The Revolutionary War had been dragging on for over five years with little hope for the Continental Army, until Lord Cornwallis committed a fatal error in fall 1781.

## What We're Reading



It actually began in the spring of that year when Cornwallis' British forces clashed with the rebel army under the command of Nathanael Greene at Guilford Courthouse in North Carolina (about 30 minutes from our home). Although the outcome was essentially a draw, Cornwallis' army was decimated and limped off into Virginia to Yorktown on a peninsula between the York and James Rivers.

Washington's original plan had been to attack New York City, but the French commander Jean-Baptiste Donatien de Vimeur, Comte de Rochambeau, convinced him that Yorktown was a more strategic target, and the two generals headed south with their respective armies.

Washington had long since realized that his only hope for victory was the French navy, although he had been frustrated by their failure to act. But now they were moving up from the Caribbean and down from Newport, R.I., to converge at the mouth of the Chesapeake Bay where they would clash with and defeat the British navy.

Cornwallis was now trapped between the French navy at sea and the combined American and French

armies on land. After the bloody Siege of Yorktown, he surrendered, ending one of the major military conflicts of the war, although it would be nearly two more years before the Treaty of Paris would officially end the American Revolution. For those who enjoy reading American history, this book is well-written and most interesting.

### ***Facts and Fears: Hard Truths From a Life of Intelligence***

By James R. Clapper, former Director of National Intelligence with Trey Brown

Reviewed by Marcia D. Carney, MD

With the introduction titled, "Beyond Their Wildest Imagination," former U.S. Director of Intelligence and ex-spy boss James R. Clapper begins his book on Nov. 8, 2016, the day of the presidential election. Clapper was in Oman on his last whirlwind trip meeting with Middle East leaders while voters in the United States went to the polls to elect the 45th president.

Donald Trump and former Secretary of State Hillary Clinton were the candidates for the job. The director's clock was nine hours ahead of Washington, D.C. Trump was considered to have a narrow path and unlikely victory over Hillary Clinton. Pundits predicted that as soon as Florida or Ohio was called for the former secretary of state, "the election would be over."

Five hours later on waking, the director found that the narrative had flipped. Then came the shock and awe. Florida and Ohio had been called for Trump. At 2:31 a.m. on the East Coast, the Associated Press declared Trump president-elect. Clapper opined that the people of Washington, D.C., were out of touch with middle America. They didn't care about Russian collusion. No one knew that Russia was just as shocked as America!

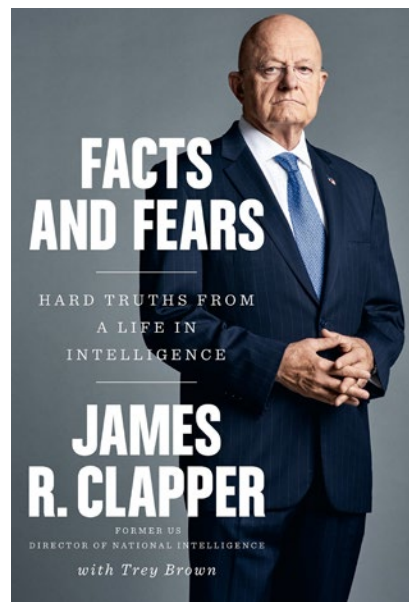
So, what did happen?  
The Zen-like terseness of this spy

baron became well-known during his tenure as director of intelligence. Now he tells how the world fell apart in "Facts and Fears."

According to recent history, the CIA, NSA and FBI continued to uncover evidence of pre-election Russian propaganda intended to undermine Clinton and promote Trump as the new president. Russian cyberoperations may have interfered with the election. However, the election was over. President Obama gave instructions to the CIA, NSA and FBI, the mission-specific tradecraft and capabilities to determine what the Russians had done.

"My concern about what I saw taking place in America-and my apprehension that we were losing focus on what the Russians had done to us – is ultimately what persuaded me to write this book, to use what we learned in our assessment to frame my experience and our collective experience as Americans," Clapper writes.

Clapper indicates that America has great strength. However, he felt that the destiny of the American ideal was at stake. Is it? In "Facts and Fears," Clapper tells how the world fell apart from his perspective. Opinions are worth their weight in gold ... or not. For me, it was a great read!



## News from the Foundation Chair

Gregory L. Skuta, MD, Chair, Foundation Advisory Board

I am pleased to announce details about the 2019 Orbital Gala and progress on the Academy's new museum, which will open before we know it! I hope to see you all there and look forward to connecting with you during foundation events.

### The 2019 Orbital Gala Will Honor Bruce E. Spivey, MD

Join us for the 16th annual Orbital Gala on Oct. 13 at the Palace Hotel, San Francisco. This year's Hollywood-themed gala will be one to remember with a cocktail reception, dinner, silent auction and live music. Participate in the silent auction for great deals on fine wine, vacations, ophthalmic equipment and

more. Proceeds will support the Academy's educational, quality of care and service programs.

At the Orbital Gala, we will be honoring Bruce E. Spivey, MD, MS, MEd, a renowned educator, clinician and transformative leader who served as the Academy's first executive vice president and chief executive officer from 1978 to 1992. During this period the organization moved from Minnesota to San Francisco, grew from four staff to over 100, merged with the American Association of Ophthalmology, formed the Academy's Foundation, developed a Code of Ethics, launched the Ophthalmic Mutual Insurance Co. (OMIC) and initiated the National Eye Care Project. These

feats could not have been accomplished without Dr. Spivey's visionary leadership and limitless dedication to the Academy.

Amongst his extraordinary achievements, Dr. Spivey is the recipient of over 40 medals and awards in ophthalmology and medicine. He is the author of more than 140 peer-reviewed scientific, education and management-related publications, and has delivered over 40 named lectures, including the Jackson Memorial Lecture. He received the Academy's Laureate Award in 2015.

Dr. Spivey has been married to Patti Amanda Birge Spivey since 1987. He has two grown children, Eric W. Spivey and Lisa L. Spivey, and four grandchildren. Dr. Spivey is a member of the Knickerbocker Club in New York, the Chevy Chase Club in Maryland, the Pacific-Union Club in San Francisco and the Cosmos Club in Washington, D.C.

To learn more and purchase tickets or to make a tribute gift, visit [aao.org/galatickets](http://aao.org/galatickets). To donate an item to the silent auction, contact Claire Lewis at [clewis@aao.org](mailto:clewis@aao.org) or 415.447.0356.

<https://www.aao.org/foundation/gala-overview>

### Museum Preview Reception at AAO 2019

This year, the Academy's annual meeting will take place from Oct. 12 to 15 at the Moscone Center in our beloved San Francisco. Before the meeting begins, we will welcome donors who have contributed to the Museum of the Eye campaign at the Partners for Sight



The American Academy of Ophthalmology is pleased to honor Bruce E. Spivey, MD at the 2019 Orbital Gala on Sunday, Oct. 13 at the Palace Hotel, San Francisco.

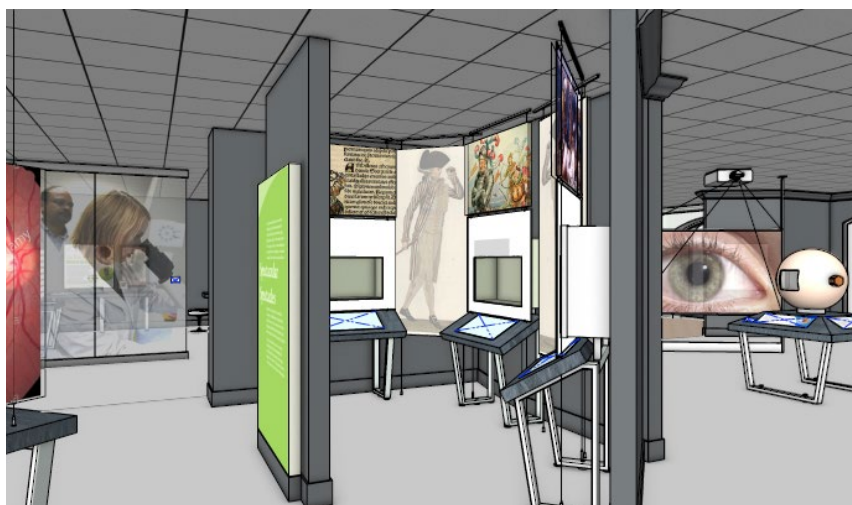


and Leadership Council levels to attend a reception on Thursday, Oct. 10 from 5:30 to 7 p.m. at the Truhlsen-Marmor Museum of the Eye. The museum preview reception is our opportunity to show appreciation to our donors for all that you do to elevate patient care through the Academy's quality of care and service programs. More details coming soon!

If you have not already done so, I encourage you to contribute to the [Museum of the Eye](#)

**Campaign.** Many options are available, from [naming opportunities](#) (PDF 136 KB), one-time gifts or a five-year pledge. To learn more about how you can help educate the world about the science of sight, please contact the executive director of the foundation, Tina McGovern, at [tmcgovern@aao.org](mailto:tmcgovern@aao.org).

In the meantime, I am always open to dialogue, so don't hesitate to email me at [gskuta@aao.org](mailto:gskuta@aao.org) if you have any ideas, questions or comments.



## SCOPE

The Senior Ophthalmologist  
Newsletter

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