Harold G. Scheie, MD: A Colorful Force of Nature Who Promoted Vision
By Eric Scheie

Harold Scheie the ophthalmologist and Harold Scheie the human being often overlapped, and it is hard for a son to say where one left off and the other began.

When the chips were down, he was both.

In a certain sense, my father was a magician. He could relate the modern to the past, the past to the modern, even the rural to the urban, the medical to the lay.

At the height of the problematic 1960s, when some parents were complaining about “free love,” marijuana and the rest of it, he could relate their challenges to those he faced growing up in the 1920s. Born in 1909, he came of age during Prohibition, learning to drink when it was illegal and gangsters were popular heroes. Instead of being shocked by marijuana (as were many younger parents at the time), he told me that it grew everywhere when he was a kid, that he had tried it and thought it was a waste of time. At the time, none of my friends’ parents shared that kind of perspective.

My dad’s nature was rural. He grew up in the Dakotas and northern Minnesota frontiers, which included living eight years on the Fort Berthold Indian reservation. The reservation was home to the Three Affiliated Tribes: Mandan, Hidatsa and Arikara Nation. His family did business with the Hidatsa Chief “Drags Wolf” — a man described by Franklin Roosevelt thusly: “This man Chief Drags Wolf is a wise old man if he only could speak English.

... Oh, what he could do for his people as a great leader of the Fort Berthold Indian Reservation.”

Among my father’s earliest memories were seeing an electric light bulb for the first time and seeing Indians cross a river that was too deep for their horses to wade through: They grabbed hold of the horses’ tails, slapped the horses on their butts and hung on while the horses swam across. Later, my grandfather (who preferred horses) bought a Model T Ford and accidentally drove it into the river, where it promptly sank out of sight. Contemplating this fiasco, my grandfather exclaimed “No horse would ever have done that!”

Among my earliest memories was meeting my grandparents: Lars Tobias (“Toby”) Scheie and Ella May Ware Scheie. They were very different from one another. Toby was a hard drinking, plain-talking man with a legendary sense of humor. Ella was a Puritan, teetotaling member of the Woman’s Christian Temperance Union (WCTU), a no-nonsense woman who, starting at the age of 16, raised her brothers and sisters after their mother died and their dad left. She was a local midwife who delivered her own children as well as those of friends and neighbors. My dad’s interest in medicine seems to have been in his genes.

The Scheie family moved to Minnesota, eventually settling down...
on a farm near Warren. Life was primitive, without running water, and the winters fearfully cold. In the winters, they held on to the wires which ran from the farm-house to the outhouse and barn buildings to avoid getting lost and possibly dying in blizzards so blinding that it was impossible to see a hand in front of a face.

It was during his childhood that my father developed his lifelong work ethic and habit of rising at ungodly hours. Many a resident used to tell me of how they would arrive for surgery shortly after 6 a.m., and my dad would snarl, “Good afternoon!” To say that he was a workaholic would be an understatement. Early in the Great Depression, when the Midwestern banks went broke, the family lost their entire savings, and my dad had to work innumerable jobs for college money. One of them was with a butcher, who, not-}

ing my dad’s talent with a knife, pleaded with my grandparents not to let him go to college, saying, “You’ll be ruining the best butcher this town has ever seen!”

At the University of Minnesota, he distinguished himself as an athlete and played varsity basketball for the Minnesota Gophers. At 5 foot, 8 inches tall, he was known as “Shorty Scheie.”

Beginning with college and on through medical school, he worked as a waiter, movie theater usher, anything he could get. At one point, working three jobs in addition to carrying a full load of courses, he assisted in an autopsy of a man who had died of pneumonia. He then fell ill himself with Type III lobar pneumonia and ended up in critical condition in an oxygen tent. It was untreatable at the time, and the last thing my dad remembered before losing consciousness was one of his favorite professors — Hobart Reimann, MD — bringing to his bedside a tray full of dead mice, which he had injected with my dad’s bug. Apparently, Dr. Reimann thought my dad’s scientific curiosity would be aroused. Fortunately, he recovered from that incident and from the pneumonia.

A close mentorship and friendship developed between my father and Minnesota medical school dean Elias Potter Lyon. Encouraged to rise to his potential, my father eventually decided to pursue his internship (which led to a residency in ophthalmology) at the University of Pennsylvania in Philadelphia. Arriving with a few dollars, he felt very much like the unsophisticated country boy he was, and it didn’t help much that Philadelphia in those days was a very snobbish place. When at first he inquired about an internship at the prestigious old Pennsylvania Hospital, he was sarcastically asked, “Did your ancestors arrive on the Mayflower?” This caused much laughter at the time, and throughout his life in Philadelphia my dad was always thought of as a country boy of immigrant stock.

Another new arrival to Philadelphia who became a lifelong friend was “Jimmy” the hippopotamus, who like my father had arrived in Philadelphia in the mid-1930s. As my father had to work long, long hours, the only time he could find off was Sunday afternoons. Without many friends at the time, he’d go to the Philadelphia Zoo, where he befriended Jimmy, who struck him as lonely. Every Sunday my father would treat him to apples and similar treats. Being used to animals as a farm boy, my dad was nevertheless surprised to discover that a huge wild beast could be so friendly and intelligent. They developed a real friendship, which lasted for the rest of Jimmy’s life. I know this will sound hard to believe, but that hippo knew my father’s voice and would come running on command, no matter where he was in the yard, whether indoors or outdoors.

I was born in 1954, and I saw this many, many times. By the
time I started going to the zoo, my father and Jimmy were into their third decade of friendship. No matter how many visitors were crowding around the enclosure yelling “Jimmy!” when my father called him, Jimmy would run or swim over, and he’d stick his head up as high as he could — often resting it on the rails, where he’d snort and stare dreamily at my father. It was like a dog wanting his ears scratched. Visitors and keepers who saw this thought it was remarkable. One keeper told my father that he couldn’t get Jimmy’s attention like that. Jimmy was eventually mated with “Submarie,” and they had babies.

Ultimately, my dad was honored to be the first resident of Francis Heed Adler, a pioneering giant in ophthalmology. He was still with Dr. Adler when World War II intervened. Dr. Isidore S. Ravdin asked him to head the ophthalmology unit with the 20th General Hospital in Burma. It was during this period that he developed the ability to perform eye surgery on a grand scale. He learned how to operate on dozens of eyes in one setting. One of my prized possessions from the World War II period is this:

His most distinguished patient was Supreme Allied Commander Lord Louis Mountbatten, who suffered a serious eye injury in the field which — had the rules been followed — would have prevented him from taking charge of a major battle against the Japanese. He told my father — a lowly captain at the time — that he was willing to risk the eye, and they came up with a risky plan of treatment whereby Mountbatten would change his own dressings and put in his own drops according to my father’s instructions. Fortunately, the plan worked, and Mountbatten was able to take command at a crucial point on the ground to defeat the Japanese at Imphal, India. For that victory Mountbatten credited my father, who was awarded the Order of the British Empire, and the two became lifelong friends.

They visited each other a number of times. I will never forget the occasion that Mountbatten went on a tour of our house and stopped dead in his tracks when he spotted my pet alligator George, so big that he lived in a bathtub. Walking over to the bathtub, Mountbatten exclaimed, “I used to have a croc!” picked George up and held him proudly.

Among my father’s other wartime acquaintances were British playwright Noel Coward, Sir Stewart Duke-Elder, the Soong
Sisters, Gen. Frank Merrill (of "Merrill’s Marauders" fame) and Gen. Joseph (Vinegar Joe”) Stillwell. One fascinating wartime patient — never famous, but quite distinguished in his own community — was Rang Lang, chief of the local Naga headhunter tribe. It was learned that he was blind, and the Americans hoped that it might be possible to gain the loyalty of this fiercely independent tribe if they could help the chief (who, it turned out, had simple cataracts).

The chief was led in by bodyguards with long swords who watched constantly, and while my father was a bit intimidated, he managed to remove the cataracts and fit the chief with glasses. The chief was so thrilled upon being able to see for the first time in years that he literally howled when he saw military vehicles driving about. In gratitude, my dad was presented with several chickens and a pair of lovely Naga brides.

Among the thousands of Chinese soldiers my father treated, a lowly private named Wang stayed in the eye unit after his recovery, ultimately becoming an indispensable part of my father’s work with the Chinese. He helped my father learn Chinese, and the two of them were able to cope with many more Chinese patients than had previously been imagined possible. Unfortunately, Wang ended up being accused of malingering thanks to jealous gossip. As the Chinese Army had zero tolerance for malingering, Wang’s superior officers ordered him to be summarily taken out and shot. Armed guards entered the hospital with a death warrant for Wang, and my dad had to immediately spring into action. In a tense scene, he pulled his pistol on the Chinese guards, ordered them out and then he ran to his commander, Gen. Ravdin. Although he was in the middle of a haircut, Gen. Ravdin took the matter up the chain of command to Gen. Stillwell, who then contacted his peer, Gen. Lin Chien Wu. Gen. Wu then sent a reprieve down the chain of command to Wang’s officers and saved the poor man’s life, thus assuring that the eye unit remained in good order for Chinese soldiers.

During the war, my father also earned a doctorate in science for original research into tropical eye diseases. When he left Philadelphia, he was an up-and-coming ophthalmologist, but he returned as a more experienced eye surgeon than ever.

In the post-war period, my dad married my mom and I was born a few years later. When I was only 7, he became the chair of the department at the medical school of the University of Pennsylvania. It’s hard for a little kid to fully understand the pressures that go with being at the top of a field, to say nothing of huge surgical caseloads. My dad could be very difficult at times, and just as he was known for being hard on his residents, he was sometimes very hard on me. But I admired my father’s coolness under pressure, and I loved him for giving me the space to be myself. He allowed me to fill the basement with reptiles, to study taxidermy and even to keep birds of prey.

There was a limit to his patience, though. At the ungodly hour of 4:30 a.m. one morning, my dad was in the bathroom shaving, when a snake that had gotten loose managed to wrap around his foot. I was awakened rather rudely and given one of his legendary ultimatums: “If I see one more snake loose in this house, they all go!” Fortunately for me, we lived in a big house, and snakes are experts at hiding, which meant there was little likelihood of such a freak occurrence happening again.

Snakes aside, that beautiful house (built in the 1920s by the du Pont family for their daughter, who sold it quite cheaply in the late ’50s when mansions had become impractical) was an important part of my dad’s personal life. It was perfect for entertaining, and my dad threw legendary annual parties for the department. Residents, staff, former residents, colleagues, military friends, ophthalmologists and other physicians from all over the country and all over the world would come. They would roast entire pigs, an entire ox and beer and liquor would flow. When my dad worked, he really worked, and when he played he really played, and he encouraged his friends and colleagues to do the same.

My father’s fees were quite low for his time, and he often remarked that when his recent residents set up new practices they would charge more than he did. In that
He was a tough guy, but I used to feel very sorry to see him worry over his patients. There was nothing he dreaded more than delivering bad news about an eye. I used to accompany him on his rounds at the local Veterans Administration eye unit (to which he donated a great deal of his time and energy without compensation). On one such visit, he was carefully examining the eyes of a polite and eager young soldier who was facing a lifetime of blindness from a Vietnam War injury. My father had to break it to him as gently as he could, that while everything possibly was being done, he would probably never see again. The kid kept his composure with such dignity, and I could tell my dad was fighting off tears. He would do anything he could for a patient in trouble.

Another incident I will never forget as long as I live occurred back in the 1970s, when I went into the office to visit my dad at work. He had a difficult case he thought might be interested in and so he brought me along when he saw the patient. The guy, who was about my age, had what looked like the worst case of pink eye I had ever seen, with eyes almost clouded over. My father introduced me and was joking about how the guy probably got the pink eye from being a little too intimate with his girlfriend, and there was some manly laughter (doubtless sexist by today’s standards). But then my dad suddenly became very serious and turned to the kid’s parents, saying, “Normaly there hasn’t been much we can do for venereal herpes [Type II] of the eye. Now, there is an experimental treatment which is not approved by the [Food and Drug Administration], so we can’t legally give it to him. However, if a medicine bottle appears on his nightstand, give it to him as directed, and it may save his eyesight.” He then looked the father in the eye and in the gravest tone, said, “And if it doesn’t work, your son will be in damn serious trouble.” Illegal or not, it worked. The kid’s eyes cleared up. My father was not about to let rules stand in the way of saving someone’s eyesight.

Another example involved a little girl who was dying of cancer. Asked by several people what they could get for her, she said she had always wanted a baby lamb. One of my dad’s colleagues was a researcher who just happened to have some baby lambs in her laboratory, and she decided on her own, “The hell with the rules” and sneaked the lamb into the little girl’s bed early one morning. As luck would have it, my father (who had known nothing about this) happened by and demanded to know what was going on. The researcher knew she had broken innumerable hospital protocols and at that point was sure she was going to lose her job. She told my father the story, and he simply looked at her, looked at the little girl, and said, “Good!”

My father’s pioneering techniques in glaucoma and cataract surgery are matters of public record, as were his fundraising accomplishments and countless awards. I think he earned his place in the history of ophthalmology, and I hope my personal recollections have helped shine some light on his human side.
in September 1917 to train soldiers who would soon be deployed around the country and the world. There was minimal concern at first because the symptoms were initially mild. But by March 1918, the flu had become virulent, with an alarming death rate (approximately 850 soldiers, mostly privates, died at Camp Devens in 1918).

It is often referred to as the “Spanish flu,” which illustrates how historical events can cloud the facts. Spain was neutral during World War I. Other countries, that were fighting on either side, were eager to maintain national morale for their war effort, and therefore minimized reports of the actual death rates (this was apparently true in the United States, where President Woodrow Wilson reportedly never even addressed the pandemic). Since Spain had no reason for such restrictions, they reported the actual numbers, making it look like the flu was worse there. Hence the name.

As the year progressed, there was still limited civilian concern, because most cases were in the military. Numbers declined in the summer. But in September 1918, following a massive Liberty Loan Parade in Philadelphia against medical advice, the influenza spread rapidly throughout the public. Most cases were mild, with fever, cough, fatigue and conjunctivitis, but severe cases had extreme pain, constant coughing and bleeding from the nose, ears and eyes (approximately 23% had ocular involvement), often culminating in cyanosis, pneumonia and death.

Although the federal government remained focused on the war, with little guidance regarding the pandemic, local governments instituted strict measures of social distancing, handwashing and wearing masks, with scenes that we would find familiar today. Following the second peak in the fall, the numbers began to decline after Armistice Day in November, although smaller peaks continued well into the 1920s. Factual numbers are hard to obtain, but total deaths worldwide are estimated at a minimum of 30 million, with approximately 700,000 in the United States (all the more staggering when we consider that the U.S. population then was less than a third of what it is today).

The 1918 flu pandemic may have influenced history in several important ways. When Wilson went to Versailles to negotiate a surrender in 1919, he became ill with what most historians have called a stroke. Barry, however, believes he acquired the flu (it apparently can cause central nervous system manifestations, including stroke). In any case, in his weakened state, Wilson accepted the draconian demands of Clemenceau of France on Germany, a decision that likely helped set the stage for World War II 20 years later.

A more positive outcome of the influenza was that it led to establishment of the National Institutes of Health in the late 1920s. Scientists continued their search for the etiology of the flu well into the 1920s and beyond. Failure to isolate the organism was assumed to be due to lack of proper tests, and investigators searched for better culture media. This is what Alexander Fleming was doing when his media became contaminated with penicillium.

A final footnote on the 1918 flu pandemic is disheartening but may be instructive. Barry notes that, when health workers pleaded for volunteers to care for the sick, almost nobody answered. As a result, when it was over, people seemed reluctant to talk about it. We can’t sit in judgment on past generations — it was clearly a different time — but we can only hope that, when future generations read about COVID-19, they will have reason to think more favorably of us.
J. Charles Garvin, MD, Ophthalmologist, Dog-Breeder and Leader

By M. Bruce Shields, M.D.

J. Charles Garvin, MD, has always loved dogs. In fact, he had once intended to devote his life to their care as a veterinarian. But a family member’s blindness and other considerations along the way led to a distinguished career as an ophthalmologist. Now, as he enters retirement this fall, he will undoubtedly be focusing more of his time on “man’s best friend.”

Dr. Garvin attended Ohio Wesleyan University, where he majored in physics and spent a semester of study and research in nuclear physics and quantum mechanics at Oak Ridge National Laboratory. However, he decided on a career in human medicine and was accepted to the University of Southern California School of Medicine, where he served as president of his student government. It was a heady time in the USC Department of Ophthalmology, as Drs. Stephen Ryan and Ron Smith were beginning to revolutionize the program. Dr. Garvin took an elective rotation with Dr. Don Minkler in ophthalmic pathology, and that apparently cinched the deal for him.

He returned to Ohio for his ophthalmology residency at Ohio State University, where he served as Chief Resident. It was again an exciting time for ophthalmology, with dramatic advances occurring in cataract surgery, and he decided to focus his career on comprehensive ophthalmology. His leadership talent had already been demonstrated during his formal education, but it was about to become one of his defining accomplishments.

Dr. Garvin joined a multispecialty group practice at the Frederick C. Smith Clinic in Marion, Ohio. Within five years, he was elected president and medical director of the group and was reelected for one-year terms 25 times. He took courses in medical executive management and organization leadership and became a certified physician executive. When he joined the group, they had 35 physicians, which he helped grow to 75, as well as negotiated the purchase of their office building and the acquisition/merger of Smith Clinic with a large hospital chain. He also managed the newly combined medical staffs when two hospitals in Marion merged and he served as their first chief of staff.

Despite a full clinical practice and heavy administrative duties, Dr. Garvin also found time for the third defining feature of his life – his love of dogs. This was actually his first passion, which began in his teens, when he got a Dalmatian for obedience training and showing. His dog became the top winning female Dalmatian in the country for five years and, at the age of 17, he won the Leonard Brumby Memorial Trophy as international champion junior showman at the Westminster Kennel Club in Madison Square Garden. From then on, the breeding and showing of Dalmatians have consumed most of his free time, even during college, medical school and residency (during medical school, he was president of the Dalmatian Club of Southern California).

Dr. Garvin and his family have owned and bred 90 Dalmatian American Kennel Club (AKC) Champions, the majority of which were personally handled by him in the show ring. He has bred some of the top winning, producing and record setting Dalmatians in the breed’s history. In 1980, he began judging dog shows and has presided at some of the largest and most prestigious shows in the country and abroad.

Dr. Garvin has demonstrated the same leadership skills in his work with dogs as he has in his medical career. He has been on the board of the Dalmatian Club of America (DCA) since 1981, serving as president 14 times, and is currently its
vice president and delegate to the AKC. He has been on the board of the Dalmatian Club of America Foundation since its inception in 1995 and is past president of the organization. In 2001, he became a member of the Board of Directors of the AKC, where he still serves, which changed his life with dogs. Because of a potential conflict of interest, he no longer breeds show dogs or competes personally in the show ring, although his role in the AKC may be even more time consuming than previously.

His most satisfying, albeit demanding, service currently is with the AKC Canine Health Foundation, the world’s largest nonprofit organization devoted exclusively to funding canine health research. Dr. Garvin has been on the board for 13 years and chair for the past five years and is proud to recall a time when his care for human vision and dog health intersected. Research funded by the foundation on congenital stationary night blindness in Briard dogs revealed the same genetic defect as in children with Leber’s congenital amaurosis, which led to the first Food and Drug Administration-approved clinical trial and treatment for genetic disease in humans.

As if all this is not more than one person can reasonably handle, Dr. Garvin has also been very active in community service, serving as president of the Marion Community Foundation, Marion Investment Trust, Marion Rotary Club and Ohio State University Citizens Council of Marion.

When asked how he balances such a full life of ophthalmology, dogs and leadership, Dr. Garvin suggests that lessons learned in one area often apply to the others. For example, he observes that “the quest to create a great show dog is similar to the continual striving to perform the perfect cataract operation” and “the problem-solving algorithms required in governing organizations is similar to paradigms of patient management.”

Dr. Garvin and his wife, Lynn, have been married for 46 years and have three adult children and an infant granddaughter. Although he plans to retire from ophthalmology this fall, it is obvious that “retirement” for him will be in name only.
To Mentor and Be Mentored, Every Senior Ophthalmologist’s Dream

By Marcia Carney, MD and Eve Powers

Editor’s note: The goal of the Academy’s Minority Ophthalmology Mentoring program is to increase diversity in ophthalmology by helping students underrepresented in medicine, such as African Americans and Latinos, become competitive ophthalmology residency applicants. Students accepted to the program receive one-on-one mentorship, guidance in medical career planning, and a weekend of learning and networking opportunities at the Academy’s annual meeting.

Here, Marcia Carney, MD, describes her mentorship of Eve Bowers, a candidate for doctor of medicine in 2021 and participant at AAO 2018. Dr. Carney says the mentor-mentee relationship is a two-way street and reveals what Bowers has given back to her.

My mentee Eve Bowers continues to pursue ophthalmology as a career and is in a perpetual soar.

Beginning her third year of medical school and still surviving, Eve just published her first paper and is now submitting three more scientific articles for publication. She admits that the studies have been hard but never impossible. She is committed.

“It is what I really want to do,” Eve says.

As a Minority Ophthalmology Mentoring participant in 2018, Eve has tried to follow all possible recommendations from her school, from the Academy and beyond. She continues to make her steady climb.

When she was not getting all that she needed from my suggestions, I directed her to Keith Warren, MD, former chairman at Kansas and a former resident of mine at Virginia Commonwealth University. He is a retina specialist and mentor to all, including his son Alexis Warren, current resident at University of Iowa under chair Dr. Keith Carter. Dr. Warren followed the virtual mentoring handbook provided by the Academy and gave Eve suggestions on moving forward. The mentoring weave continues.

Eve is currently in good standing at the University of Pittsburgh with excellent grades. She earned honors in surgery, specialty care (ENT/ophthalmology) and honors in internal medicine, with a GPA close to 4.0. She is a candidate for doctor of medicine in 2021, receiving honors in ophthalmology, family medicine and internal medicine. She was awarded the Rabb-Venable Excellence in Research Award in 2018.

Eve’s brother, Levi, is one year behind her at University of Pittsburgh School of Medicine. Both Eve and Levi like the idea of giving a senior ophthalmologist a little help with publications.

“We will help wherever we can,” says Eve, whose father is an ophthalmologist.


This is one way ophthalmology students and residents in any level of training or practice help to keep us senior ophthalmologists current and ready to teach and train.

It literally takes a village to mentor a student or resident. The Academy and Association of University Professors of Ophthalmology’s mentoring support have been monumental in their development.

The students and residents are the best of the best. They are the Academy’s “Top Gun.” They make the mentoring commitment a delight, a task worth undertaking. They definitely keep the senior ophthalmologists awake and moving.

To learn how to become a mentor or learn more about the program, visit aao.org/minority-mentoring.
Matthew Dinsdale Davis, MD: A Master at Finetuning Clinical Trial Methodology

By Frederick “Rick” Ferris, MD

Matthew Dinsdale “Dr. Davis” Davis, MD, was a wonderful mentor, not just individually but also to both the retina community and the clinical trials community.

Because of his unassuming presence his accomplishments may not be well-known, even though he received the Howe Medal from the American Ophthalmological Society and the Laureate Award from the Academy. His passions were his family and his work, and he continued as emeritus professor at the University of Wisconsin into his 90s.

Dr. Davis attended the Lawrenceville School, a prep school in New Jersey, and returned home to Madison for his undergraduate degree at the University of Wisconsin-Madison. He received his medical degree from the University of Pennsylvania and returned home again to complete his ophthalmology residency in 1955 at the University of Wisconsin Hospital, although that was interrupted for two years of active duty in the U.S. Naval Reserve.

After completing his residency, Dr. Davis said his father, an ophthalmologist in Madison, Wis., recognized that retina was the coming field in ophthalmology and suggested that Dr. Davis apply to Dr. Charles Schepens at Massachusetts Eye and Ear Infirmary to become one of his first fellows. He had the goal of learning how to use the indirect ophthalmoscope and repair retinal detachments.

For the first four months of the fellowship, Dr. Davis had trouble using the indirect ophthalmoscope with any facility. He finally decided that if he could not learn to use the indirect ophthalmoscope effectively by Thanksgiving, he would give the whole thing up. Almost miraculously, a day or so before Thanksgiving, it all came together, and he continued his retina training.

Once again, Dr. Davis returned to his hometown where he practiced as a retinal specialist. He joined the faculty at the University of Wisconsin, where in 1970 he became chairman of the newly formed department of ophthalmology. Dr. Davis’ life changed direction dramatically in 1971 when he successfully obtained the grant to conduct the Diabetic Retinopathy Study (DRS).

It not only changed his life, but his efforts in designing the DRS laid the groundwork for how clinical trials are carried out today. Because this was the first major multicenter randomized clinical trial in ophthalmology, there was no template for conducting such a trial. At that time, there were a few large National Institutes of Health randomized trials, such as the University Group Diabetes Project, that provided some guidance.

For the most part, Dr. Davis, along with the help of Genell Knatterud, who ran the coordinating center for the DRS at the University of Maryland, and Fred Ederer, who was the project officer for the study at the National Eye Institute, had to develop the study manual of procedures from scratch. Although commonplace today, following a study protocol was new to the investigators of the time.

Dr. Davis’ ability to listen to everyone was critical in orchestrating the compromises necessary to develop a consensus on how to standardize all the varied clinical and methodologic procedures necessary for a well-designed randomized multicenter clinical trial. For example, the outcome variable for the DRS was defined as “blindness” in the grant application. The original draft manual of procedures defined blindness...
OPHTHALMIC HISTORY

Matthew Dinsdale Davis, MD

as 20/200 visual acuity or worse using a Snellen chart. The level of visual acuity was to be the smallest line with one or fewer mistakes.

Obviously, this needed to be changed, since the 20/200 line was only the letter “E.” Furthermore, it seemed more appropriate to have a more severe level of vision loss as the primary outcome. It also seemed important to have an outcome that included some persistence of blindness because vitreous hemorrhages could clear. This led to the primary outcome being visual acuity less than 5/200 at two consecutive four-month visits.

Dr. Davis patiently worked with the study group to develop the first visual acuity protocol. This required completely new charts as well as a detailed refraction and visual acuity testing protocol. But developing a written manual of procedures was only the first step. Dr. Davis recognized that the clinical sites were not accustomed to following study protocols and he instituted site visits to each clinic. He was correct about the need for emphasis on standardization. Clinic staff members were accustomed to doing things their way. One clinic had a visual acuity lane that was 17 feet long instead of the protocol defined 20 feet. When asked why, the answer was that the room was only 20 feet long.

Change was difficult. In addition, the protocol had the study ophthalmologists doing the refractions and visual acuity exams. The site visits demonstrated that this was not a good idea. It was apparent that these visual acuity examinations would not be reproducible across clinics or even within clinics. The time pressures on the study ophthalmologists would not lead to consistent outcomes, even if they all agreed in writing to follow standard procedures. Training technicians to do the visual acuity protocol, may not have led to the best possible visual acuity at each visit, but it did lead to reproducible acuities. Of all the protocol innovations, this one may have been the most important. It is hard to imagine clinic ophthalmologists doing the refractions and visual acuities in clinical trials today.

Dr. Davis worked with the study principal investigators to develop a manual of operations that was both practical and detailed. His patient personality, with personal visits to each clinic, was critical to getting these leaders to change their routines with the goal of standardization across clinics.

Developing the standardized methods for the protocol was important, but developing the collaborative atmosphere for doing these long-term clinical trials was equally important. There can be no doubt that Dr. Davis’ brilliance allowed him to develop the advances in clinical trial methodology. However, it was his ability to work with others that was critical to the success of the DRS and the other trials in ophthalmology that followed.

Dr. Davis always listened carefully to all opinions. He was particularly adept at finding the common ground and developing a compromise that could be accepted by all. This feeling of collaboration and contribution by all the study investigators was a critical part of the success of the DRS. His kindness and consideration for others, made co-investigators want to work with him. His example of careful listening and consideration for others, has evolved to become a common denominator that has led to the success of decades of clinical trials and is the underpinning of the Diabetic Retinopathy Clinical Research Network and its many clinical trials, which he helped develop.

Each of the DRS principal investigators was a well-published independent researcher. Dr. Davis insisted that the DRS was not his trial, it was the study group trial. He and study leadership did the work of writing study papers, but he was adamant that the authorship must be attributed to the study group not to one individual. This was a group effort that no individual could have accomplished. Journal editors have made joint authorship more difficult today, but in these early years of clinical trials, emphasizing the input of a broad spectrum of study personnel was particularly important.

Developing a model for future clinical trials in ophthalmology was a major advance, but there were ongoing trials in other fields, so the DRS was not unique. A unique contribution that Dr. Davis made to the field of ophthalmology was the ability to classify the severity of diabetic retinopathy combined with the methodology to standardize the classification...
through the use of fundus photographs and trained graders.

When starting his retina practice, Dr. Davis made careful serial retinal drawings of each of his patients with diabetic retinopathy. This evolved to training an assistant, Yvonne Magli, to help with the drawings and finally to the now familiar serial seven field stereo fundus photographs. It was said that diabetic retinopathy was so diverse that classification was impossible.

However, using the serial drawings and the serial fundus photographs Dr. Davis had collected at his Wisconsin clinic, he was able to develop a classification system for diabetic retinopathy that was both reproducible and predictive. This standardized classification system evolved into the “Early Treatment Diabetic Retinopathy Study Classification” which has been accepted by the Food and Drug Administration as a validated outcome variable and has been utilized to demonstrate the efficacy of treatments to slow the progression of diabetic retinopathy, as well as to clinically assess the severity of diabetic retinopathy.

Dr. Davis extended this methodology to standardized classifications systems for lens opacities and for age-related macular degeneration. Imaging is particularly useful in documenting eye health and disease, and many others have utilized the methodology first developed by Dr. Davis to standardly assess disease progression using images ranging from the cornea to the optic nerve.

Dr. Davis has been thought of as the father of clinical trials and this is in large part because of his ability to bring people together. He embodied clinical trials even when relaxing. His team approach to clinical trials extended to sharing drink and food with his co-investigators. At these social events, he debated whether there were important differences between wines. He agreed that there were differences between red and white wines, but limited his efforts to simply differentiating between the two based on their color and respective prices.

After a long day at one of the many study investigators meetings, a group of investigators were off to dinner. They were sitting around having a beer before dinner and the debate began again as to whether one could tell the difference between the various beers available at the table. Dr. Davis agreed that imported beers were different, but opined that all American beers taste the same. One investigator took the bait and claimed he could tell Michelob from the other two (Budweiser and Miller Lite).

Dr. Davis said that as a clinical trial investigator, one should get the full clinical trial experience and be a trial participant and sent him off to the Men’s Room. On returning, the “trial participant” found six identical glasses of beer and three different empty bottles in front of Dr. Davis. As the tasting got underway it was clear there was a problem. Apparently, they all did taste the same. After much consternation, the investigator chose all but one to be Michelob. It turned out that Dr. Davis had filled all the glasses with Michelob.

Dr. Davis built teams with dedication, thoughtful listening and with humor. His selfless devotion to quality set the standards and tone for future collaborative clinical trials. It is important to remember how things that we take for granted today developed. Because Dr. Davis was at the heart of developing clinical trial methodology, he has become a mentor to all of us involved in clinical trials.

Matthew Dinsdale Davis, MD

Talking to Strangers: What We Should Know about the People We Don’t Know
By Malcolm Gladwell
Reviewed by Eve Bowers and Marcia Carney, MD

Have you ever given a lot of thought to how or why your interactions with strangers go wrong or do you try to assess what would have made the interaction better? Or are the two the same and we name them differently?

Malcolm Gladwell, the author of five New York Times bestsellers, including “The Tipping Point,” “Blink,” “Outliers,” “What the Dog Saw” and “David and Goliath,” could have named this “Strangers and Wrong Interactions in History.” However he decides to allow us, through societal figures, to delve deeper into the personality of the “stranger” with whom the conversation is shared. This lets us intuitively look at ourselves, as he promotes, to try to make understanding out of meaning when we interact with others.

One reader shared that “Talking to Strangers” is the latest installment of Gladwell’s quest to challenge our understanding of how the world works.” This may be right. “In all these cases, the parties involved relied on a set of strategies to translate one another’s words and intentions. And in each case, something went wrong. “In ‘Talking to Strangers,’ I want to understand those strategies — analyze them, critique them, figure out where they came from, find out how to fix them,” Gladwell writes.

Taking Sandra Bland, Amanda Knox, Jerry Sandusky, Sylvia Plath, Bernie Madoff and Adolf Hitler, Gladwell cracks open the mystery of why we may trust people that we shouldn’t and maybe even fail to trust the people that we should. The introduction was difficult to read. A life was lost in the introduction following an altercation between strangers. It was a difficult part of history.

The book is best described in his own introduction. Described as a Gladwellian intellectual adventure encompassing history, psychology, scandals among strangers, Gladwell weaves stories including financier Bernie Madoff and his deceptions, the Amanda Knox trial, the suicide of Sylvia Plath, the hanging death of African American Sandra Bland while in a Texas jail cell and the pedophilia scandal at Penn State University involving Jerry Sandusky.

I think that Gladwell says it best in his introduction: “Something is very wrong with the tools and strategies we use to make sense of people we don’t know. And because we don’t know how to talk to strangers, we are inviting conflict and misunderstanding in ways that have a profound effect on our lives and our world.”

Gladwell used ideas of psychologist Tim Levine, someone whose ideas Gladwell trusted about the problem of why we are deceived by strangers such as Madoff, the investor who ran the largest Ponzi scheme in history, Sandusky, the Pennsylvania State University football coach convicted of sexual abuse, and the discovery of the Cuban spy Ana Montes, working undercover as a CIA agent for the United States government.

The character development of each individual is powerful. The return of the story initially told in the introduction and returned to at the end of the novel is also very powerful. Sandra Bland was pulled over by a Texas state trooper in Waller County Texas for failing to signal a lane change. Three days later she was found hanged in her jail cell. It was later ruled a suicide.

Gladwell dissects the eventual deadly encounter. The talking between the strangers was insulting and left no room for civility. The policeman, the public servant, left no room for this stranger to gather respect.

In the beginning of the book, Gladwell revealed that his father liked to speak to strangers. What was his secret?
What We’re Reading

Year of Wonders: A Novel of the Plague
By Geraldine Brooks
Reviewed by Alfredo Sadun, MD, PhD

This is a work of fiction — but barely.

Much is nonfiction and extremely relevant to you. It is historically accurate and extremely apropos for today. It was inspired by the true story of Eyam in rural England, where the plague known as the Black Death arrived in 1666. Brooks obviously made up the dialogues, but the story of this remarkable village and how it adapted to the plague is very real.

The rich and influential, knowing something of the contagiousness of plague, reacted by leaving London to isolate themselves in their country mansions. There remained in the north of England a small village built around a community of lead miners and subsistence farmers.

When the bubonic plague came, villagers reacted as most in England and Europe had. The Black Death first arrived in Europe about 1350, and then after every generation or two, another cycle of plague arrived. Often, bubonic plague would carry off half the population of a city or town. Opposite to our present pandemic, it would spare the oldest, as they were probably exposed and became immune in the previous cycle.

In Eyam, as in other villages, the community panicked and tried everything from sorcery to the murder of innocents accused of poisoning their wells. But in Eyam, something quite remarkable and wonderful happened. A strong and charismatic preacher convinced the members of this village to self-isolate. Theirs would be a voluntary quarantine.

Brooks, who won a Pulitzer Prize for her wonderful prose and for her careful research for her novel “March,” does a great job of showing us the gamut of human emotions during a pandemic. With heroic effort, the preacher was able to keep some control over the fear and selfishness of his community. He convinces them that if they flee, they would find themselves homeless, friendless and pilloried, and if they didn’t die from plague, they would die from starvation or abuse.

Hence, in addition to being virtuous, it would be in their self-interest to stay and take their chances. He also convinced a rich patron from a neighboring village that it was in the interest of the broader community to support this quarantine. So food and other critical supplies were brought weekly to a stone marker on the border. A delivery cart would leave the rations and then pick up messages informing the outside world about what was happening in Eyam and what was needed.

Not having either Purell or microwaves, they used vinegar to disinfect the messages (see photo). After a year’s time, about half the Eyam villagers died. But the plague burned out and spared the rest and immortalized the preacher and his village for their courage and sacrifice. A monument now stands not far from the stone marker.

Brooks did her research, so I was inspired to do some more. Do you know where the word “quarantine” comes from? It’s Italian, for 40 days. That was the period of time, inspired by the bible, that was required for boats from plague-infested areas to spend isolated at harbor, before they could dock.

Logavina Street: Life and Death in a Sarajevo Neighborhood
By Barbara Demick
Reviewed by Samuel Masket, MD

Perhaps life was too busy for me or my focus was elsewhere, but admittedly I knew little of the issues and players involved in the Bosnian War during the early 1990s. I had come to appreciate this author’s style and the information I garnered from her book “Nothing to Envy,” concerning contemporary life in North Korea.
What We’re Reading

When I learned of her book about the horrors of war in the former Yugoslavia, I took the opportunity to be educated by her once again. Yugoslavia was a conglomerate of nation states that, although culturally and historically diverse, existed as a socialist single nation that was held together by Marshall Tito between 1945 and 1992. With the collapse of the Soviet Union, nationalism spread across Eastern Europe and Yugoslavia split into several countries with varied cultural and religious backgrounds. Among those countries, Croatia, Bosnia Herzegovina and Serbia battled over independence, but the war was centered also on religious differences.

As is her style, Demick conveys her message through the lives of ordinary people and how they are impacted by the events of the day. Logavina Street was a six-block long avenue in a residential section of Sarajevo, a multi-ethnic contemporary capital city that hosted the 1984 Winter Olympics. Before the war, religious and cultural diversity flourished among the 200 or so families that resided on this picturesque avenue.

Roughly 11,000 residents died during the three-and-a-half-year siege of Sarajevo, during which time there was ethnic cleansing, rape and attacks on civilians. Snipers regularly and readily targeted children. Through their stories, we learn how life changed rapidly and radically for some of the residents of Logavina Street and how they adapted to the loss of electricity, water, food and staples. But more so, we came to understand the resilience and adaptability of humans and how children could find joy even in a war zone.

Although saddened by the history, I remain very grateful for what Demick has taught me. For those who enjoy nonfiction, her book is strikingly educational while enjoyable to read; there is much to learn from her.

Among those countries, Croatia, Bosnia Herzegovina and Serbia battled over independence, but the war was centered also on religious differences.
BOOK REVIEWS

What We’re Reading

of the Navy, helped his friend, Dr. Leonard Wood, form the First U.S. Volunteer Cavalry, better known as the Rough Riders (slang for “cow-boys”), trained their troops in San Antonio and Tampa, took them to Cuba and defeated the Span- ish (although it was Kettle Hill, rather than San Juan Hill, that he charged up). He returned home a national hero and was nominated for governor of New York that fall.

The book is obviously full of detail and might not be your cup of tea unless you are a fan of this time in American history. I personally enjoyed it and found it to be well-researched and quite readable. It was of particular interest that the author observed how this brief, and some-what insignificant, moment in his- tory forever changed two aspects of our country. It was our first aggres- sion against a foreign country and changed U.S. foreign policy from isolationism to a world power, with a sense of obligation to intervene in world conflicts. And it began the evo- lution of our military from a small, standing army, with reliance on call- ing up civilian volunteers when need- ed, to a strong, central military force.

The book essentially covers six months in 1898, from the explosion of the USS Maine in Havana harbor in February to the Battle of San Juan Heights in July.

Just Mercy: A Story of Justice and Redemption
By Bryan Stevenson
Reviewed by John R. Stechschulte, MD

“Bryan Stevenson is America’s young Nelson Mandela, a brilliant lawyer fighting with courage and conviction to guarantee justice for all”, wrote Desmond Tutu.

This book is the true story of Stevenson as he establishes a law organization to defend poor, sick and oppressed victims who have been sentenced to death. He helps free many capital punishment pris- oners who were clearly innocent. He seeks reduced sentences for those being punished to an excessive degree for crimes they committed. He forms the Equal Justice Initia- tive (EJI) and argues before the Supreme Court on five occasions.

In “Just Mercy,” he tells the story of Walter McMillian, a young black man who was sentenced to death for murdering a white woman whom he could not have killed. Over years of representing McMillian, Stevenson discovers conspiracies, battles legal inequities and confronts political manipulations. He and EJI serve children who are prosecuted as adults and the disabled oppressed by the criminal justice system. Stevenson struggles during the book to remain idealistic and driven to succeed. He is nearly broken but is inspired by the passion to bring true justice to those he represents. He leads the reader to show mercy to all victims and all prisoners.

During one of McMillian’s legal hearings Stevenson meets Mrs. Williams, who comes to the courtroom to show support for both men at a time that is crucial for the lawyer. She states, “I may be old, I may be poor, I may be black, but I’m here. I’m here because I’ve got this vision of justice that compels me to be a witness.” Stevenson then learns Mrs. Williams had previously witnessed beatings during the 1965 march for voting rights at the Edmund Pettus Bridge in Selma, Ala.

A few years after Stevenson gained McMillian his freedom, they travel to the New York University School of Law, where Stevenson teaches law students that brutally unfair cases of injustice occur within the United States. McMillian’s admission that he was not angry or bitter for being imprisoned for years, just grateful to be free, greatly impacts the students. The reader is left with the hope that improving our police, prosecutorial, criminal law and prison systems will continue, especially for those who do not have the means to be treated fairly.

The Seine: The River That Made Paris
By Elaine Sciolino
Reviewed by J. Kem- per Campbell, MD

Elaine Sciolino came to Paris in 1978 as a young foreign cor-respondent for The New York Times. Like many American visi- tors she was enchanted by the city and has made it her permanent home for the past two decades.

Sciolino’s fifth book, “The Seine,” is an unabashed love let-ter to the river which begins on a plateau in the province of Burgundy and winds in a north- westernly direction nearly 500 miles to empty into the Eng-lish Channel. At its midpoint, like a diamond pendant on a
Editor’s Note: A number of senior ophthalmologists, over the years, have published books about their careers and other aspects of medicine as well as non-medical books. In this issue of Scope, we introduce a new feature in which we will highlight books written by our colleagues. If you have published a book, or know of a colleague who has done so, we hope you will let us know, so we can include it in this column in future issues.

In his new memoir, “Something in Return: Memoirs of a Life in Medicine,” George H. Kurz, MD, recounts vignettes from his 37 years in ophthalmology. Some are surprising or humorous while others are inspiring, and a few are tragic.

A Philadelphia native, Dr. Kurz attended the University of Pennsylvania for his undergraduate and MD degrees and ophthalmology residency. He practiced at Hunterdon Medical Center in New Jersey and continued on the staff of that hospital until his retirement. He served as clinical associate professor of ophthalmology at New York University and clinical professor of ophthalmology at Robert Wood Johnson Medical School. He lives in a retirement community in Pennsylvania.

Over the years Dr. Kurz traveled to China, Ecuador, the Philippines, as well as several places in Africa for teaching and patient care. On one particularly rewarding occasion in Tanzania, he oversaw the first implantation of an intraocular lens ever in that country.

“The opportunity to peek over the shoulder of an eye surgeon is rare,” says Lewis P. Bird, PhD, a retired university professor of medical ethics, in a review on Amazon. “In this fascinating memoir,” Bird continues, “Kurz takes us on one adventure after another, both at home and abroad, when a physician is a Godsend. This gifted storyteller lets us discover how the heart of medicine beats.”

The book contains a foreword by Stuart L. Fine, M.D., emeritus professor of ophthalmology, University of Pennsylvania School of Medicine. Five excerpts from the book have been published in Scope in recent years. It is available in hard cover or paperback as well as a Kindle edition.
It is always with deep appreciation and amazement for the committed work you continue to do and for your generosity to the foundation that we provide this quarterly update. During these shifting and challenging times of COVID-19, we are especially appreciative of your support and understanding as we modify our activities in sensitivity of our new normal.

I hope to see you all at AAO 2020 and look forward to connecting with you during foundation events.

We wish you the best as you keep yourselves, your patients, your loved ones and our communities safe. Please feel free to reach out to me any time at gskuta@aao.org.

SAVE THE DATES FOR THE ORBITAL GALA DURING AAO 2020

Like the annual meeting, the Orbital Gala will be a new and exciting, all-virtual event.

Join us for the 17th annual Orbital Gala from the comfort of your living room on Saturday, Nov. 14 at 5 p.m. PST.

Visit aao.org/gala to learn how to support the gala and for the latest updates on the auction, entertainment and more. All proceeds will benefit the new Truhlsen-Marmor Museum of the Eye.

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IN MEMORIAM: RICHARD P. MILLS, MD, MPH

Richard Mills, MD, esteemed physician, teacher and leader, died on May 9, 2020 from complications of COVID-19. He was 76.

For more than three decades, Dr. Mills was an integral part of Academy leadership, most notably as EyeNet® Magazine’s chief medical editor, EyeCare America® chair and Academy president. His 14 years of EyeNet® columns were legendary, with a total of 148 opinion pieces that combined medicine, music, philosophy, lexicography and mythology with pop culture references — all the while, shedding light on important issues facing ophthalmology. He was the foundation’s Orbital Gala honoree in 2016.

Academy CEO David W. Parke II, MD, referred to Dr. Mills’ contributions to the Academy as protean. “He believed fervently that every ophthalmologist had a responsibility to serve others, rather than (as he referred to it) to ‘hitchhike’ on the contributions of others,” said Dr. Parke. “His laugh was unmistakable, and his comments were pithy and humorous. Dick was one of the good guys — the best guys. We will miss him.”

We hope you will honor Dr. Mills with a gift in memoriam; please visit our donation page.

CATHARINE CLARK RISING BEQUEATHS SUBSTANTIAL AMOUNT TO THE FOUNDATION

We are honored to announce a very generous donation to the American Academy of Ophthalmology Foundation. Upon her death in January 2017, Catharine Clarke Rising, PhD, bequeathed $500,000 of her estate to support the Academy’s educational, quality-of-care and service programs. Rising authored books on Joseph Conrad and Heinz Kohut and was a certified community college instructor.

Little else is known about Rising or why she remembered the Academy in her estate, but her legacy will live on through our members and the patients we serve.
Editor’s Note: In this issue of Scope, we introduce a new feature entitled “Notable Dates In Ophthalmology,” courtesy of Associate Editor of Ophthalmic History Daniel M. Albert, MD, MPH, with the assistance of Jane Shull. Each feature in future issues will highlight seminal events in the annals of our ophthalmic heritage.

25 YEARS AGO: 1995
The third edition of the three-volume work “Ophthalmic Pathology: A Textbook and Atlas” edited by William Spencer was displayed at the American Academy of Ophthalmology meeting in Atlanta, Ga. by the Saunders Publishing Co. This was regarded by many as the “bible of eye pathology” over the next decade.

50 YEARS AGO: 1970
Drs. Marvin Quickert, Lester Jones and John Wobig describe a procedure for the treatment of ptosis by external levator aponeurosis advancement.

75 YEARS AGO: 1945
Charles Schepens, MD, at Moorfields Eye Hospital designed the modern binocular indirect (headband) ophthalmoscope. The prototype model is in the Smithsonian Institute.

100 YEARS AGO: 1920
Jules Gonin, MD, of Lausanne, Switzerland reported to the French Ophthalmological Society his success in curing retinal detachment by localizing retinal breaks and closing them with thermocautery.

500 YEARS AGO: 1520
Ibn Rushd, known in the western world as Averroes, reviewed Aristotle’s work on vision and rejected Aristotle’s emanation theory of sight, which stated visual perception was accomplished by beams emitted through the eyes.

Printed in the AAOO Transactions from 1947, Dr. Charles Schepens, MD, pictured right, demonstrating the binocular ophthalmoscope. Courtesy of the Truhlsen-Marmor Museum of the Eye.