

COMMUNICATION IN OPHTHALMOLOGY

How physicians are using modern technology and the Internet to super- charge education around the world.

Andrew Doan, MD, PhD

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Moore's law describes a phenomenon in which the number of transistors that can be placed on an integrated circuit doubles approximately every two years. We have observed this trend for more than 50 years; and consequently, many digital devices, computer processors, and memory devices grow at exponential rates as Moore predicted. This exponential growth seems to have no limit and will likely continue for years to come. The combination of the explosive growth of computing power with the expanding access afforded by the Internet facilitates delivery of educational resources around the world.

Today the most significant factor affecting how we communicate within our society relates to advances in telecommunications and computing power. Compare today to 150 years ago when Lewis and Clark explored the Western United States. Communication was so slow that it took months before President

Jefferson received news of their arrival in Oregon. For Jefferson, information traveled at the pace of very fast horses. The telegraph in 1837 changed the pace and allowed the transmission of information almost instantaneously. Our society enjoyed incredible advancements in telecommunication technology with the invention of the radio, TV, and satellite communications.

The advancements in telecommunication technology, most notably the internet, have leveled the information playing field and allow all members of our society access to information about music, art, and science. This has been nothing short of a revolution—a telecommunication revolution. Similar to how the Guttenberg Press increased the distribution of books, the



The latter was a key component in the foundation for what we know today as the Internet. Eventually, Google assumed the role of the electronic librarian for billions of people, cataloging and organizing electronic content and media for anyone with Internet access.

Internet significantly increased access to information that had been sequestered in various institutions and repositories often closed to the general public. For medicine, the impact of the telecommunication revolution has been profound. Through the Internet, *(Continued on page 2)*

Communication

(Continued from page 1)

educators and physicians communicate, share information, and collaborate 24 hours a day, 7 days per week using websites like Facebook, LinkedIn, Twitter, YouTube, and the American Academy of Ophthalmology professional networking website at the time most convenient to each individual. Internet resources fulfill the “just-in-time learning” needs of medical students and young physicians. We are seeing that young physicians are shifting from traditional textbooks to online educational resources as their primary reference. Ophthalmology residents, for instance, search for narrated surgical videos to review for their surgical cases rather than reading about the surgical technique. Additionally, students and young physicians search for online references “just-in-time” when they most need the reference, such as before the surgical case.

Online educational resources are packaged in a large array of formats. There are discussion forums, university internal peer-review websites, video websites, podcasts, social networking sites, distance learning with multi-media resources, and online peer-reviewed resources. Although they differ in format, the unifying features common to all these resources are: easily accessible through the Internet, provides “just-in-time” reference, and may be accessed using multiple platforms and portable devices. Each of these modalities deserves additional discussion below.

Discussion forums encourage formation of online communities where participants ask and answer questions. Many participants post questions using an alias, which alleviates the fear of asking “the stupid question”. Discussion forums are indexed by search engines for easy search and access; thus, popular discus-

sion forums gain in popularity as their topics appear first on search engine results.

Universities are creating websites to publish articles, case reports, and morning rounds presentations. These websites are usually internally peer-reviewed to assure quality and accuracy, for instance the University of Iowa www.eyerounds.org. Residents may document their competency using the online case report format. As more universities create websites, search engine indexing allows easy access to topics and references.

Online video archives, such as youtube.com and eyetube.net, deliver amazing video resources. If a picture is worth a thousand words, then video is worth millions of words, particularly when dealing with surgical techniques. Online videos allow review of surgeries and procedures when most needed, i.e. “just-in-time learning.” Videos are shared with viewers around the world and work well with mobile phones and mobile devices.

Podcasting is similar to delivery of messages via radio, except listeners download the content that interests them when they want. Physicians access a library of audio and video programs on multiple devices, for instance AsSeenFromHere.com. Podcasts are popular because listeners can listen to audio programs in the car, while exercising, and using portable audio devices like the iPod.

Social network websites, like Facebook.com, combine all of the above websites into one. For example, Dr. Thomas Oetting has archived over 200 cataract surgery videos on Facebook.com, allowing him to teach thousands of surgeons around the world. More than 7600 individuals subscribe to his cataract surgery video resource on Facebook.com, and individual cataract surgery

videos facilitate discussion in a worldwide journal-club format.

Utilizing cameras, Internet connections, and high-resolution monitors, educators in highly specialized disciplines, such as eye pathology, are able to participate in distant training programs with residents. Dr. Robert Folberg has successfully used this approach to assist in satisfying graduate medical education requirements for programs without an eye pathologist on faculty.

As more peer-reviewed literature migrates to open-access, pubmed.gov provides “just-in-time learning” of classic peer-reviewed papers. Physicians are able to access peer-reviewed data in a timely manner to help guide clinical decisions. As educators, we need to emphasize to our students and residents the importance of accessing the peer-reviewed literature to verify the accuracy of non-peer reviewed materials on the Internet. Unfortunately, not all peer-reviewed papers are open-access; thus, the increase in popularity of open-access educational resources.

Through The Ophthalmic News and Education (ONE™) Network, (www.aao.org/one), the American Academy of Ophthal-



mology provides peer-reviewed resources and peer-reviewed links to useful online resources. The ONE™ Network is being upgraded to allow delivery of video, audio, articles, and interactive educational tools. The ONE™ Network will provide peer-review of non-Academy resources and will provide a trusted ophthalmic reference for ophthalmologists.

The advancement and evolution of information technology is exciting, but also presents new challenges for educators. Young physicians and medical students prefer Internet resources and are more likely to use online resources as their primary reference. The challenge for all involved in academic ophthalmology is to embrace new information technology, train new physicians how to properly use Internet resources, and to develop trusted educational material that can be shared using the Internet in an open-access format.

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WEISS'S RING: BUT WHO WAS WEISS?

William S. Tasman, MD

I used to tell my ophthalmology residents, "If you want to be remembered, don't expect that it will be for the number of papers or books you write or surgeries you perform. You are more likely to be remembered if a disease or a sign is named after you."

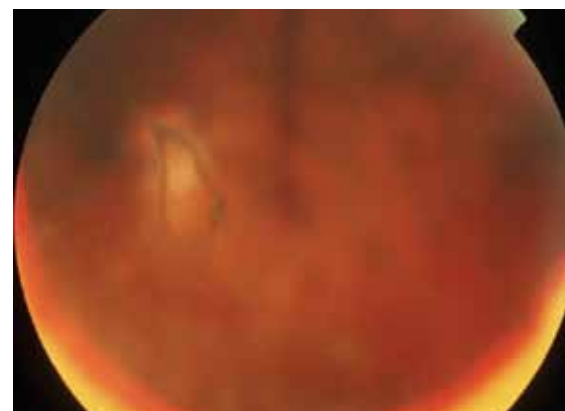
However, like a lot of advice, this theory is somewhat flawed. Having something named for you is no guarantee that people will know who you are.

Ophthalmology residents quickly become familiar with Weiss's ring, which is the hallmark of a posterior vitreous separation. But in an informal survey of a group of ophthalmology residents and staff at Wills, not one knew who Weiss was. Neither did I nor did several other ophthalmologists outside of Wills who were also queried.

Who, then, was this man who is credited for recognizing the ring named for him? Leopold Weiss was born in Giessen, Germany, in 1849 and died in Mannheim in 1901 of pneumonia. Weiss studied medicine in Giessen, Tubingen, and Vienna. After graduating from Giessen in 1874, he became an assistant at the University Eye Clinic in Heidelberg under O. Becker and also maintained an office in nearby Mannheim. Others, including Briere in 1875 and Galezowki in 1877, preceded Weiss in describing an opacity in front of the disc in myopic eyes, which they recognized as a vitreous detachment. Their finding was supported by Weiss, who published his observation, made only with a direct ophthalmoscope, in Albrecht von Graefe's *Archiv für Ophthalmologie* in 1885.¹

Are there other "unknown"

individuals who have a sign or a disorder named after them? To mention just a few, the names



Posterior vitreous detachment. This patient has a glial floater (Weiss ring) overlying the area of Martegiani of the optic disc. (Courtesy of Hermann D. Schubert, MD)

of Best, Coats, Leber, and Star-gardt come to mind. But who were they? How about Shafer's sign (pigment, sometimes called "tobacco dust," in the vitreous suggestive of a retinal break or detachment)?² I daresay that many ophthalmologists would not know that Shafer was a post-World War II retina surgeon in New York City. In fact, in another totally unscientific poll of residents and fellows, prominent names such as Leopold and Maumenee evoked blank stares.

All of this reminds me of something a good friend told me: If you want to know how long you will be remembered, put your foot in a bucket of water, make a footprint, and see how long it takes to disappear.

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2. Shafer DM, Stratford DP. *Binocular indirect ophthalmoscopy*. In: Schepens CL, Regan CDJ, eds. *Controversial Aspect of the Management of Retinal Detachment*. London: J & A Churchill; 1965:51.

Changing Methods of Communication

To a large extent, the internet has completely changed the way in which we learn about new ideas and research results in medicine. Not long ago, medical journals were the main sources of current information. We spent hours reading about the latest and best accepted methods of diagnosis and treatment. There were evidence-based trials, and tables and charts representing collated data. Many informative journals were thick with advertisements. We went to medical libraries where there were vast sources of reference information such as current and old copies of books and journals. Now many library shelves are bare and replaced by cabinets of videos, DVDs and electronic caches of journals. The old Periodic Reading Rooms are filled with cubicles for computer and smart-phone use.

As the pace of medical knowledge rapidly multiplies, and preferred practice patterns come and go, there has been almost too much information available to physicians. Most reputable authors decide where they would like their scholarly work published based on the reputation (impact factor) of journals. Editors of the leading journals receive many manuscripts which are evaluated and refereed. Because of space limitations it is often difficult for editors to choose those articles to be published. Peer-reviewed journals are supported by society memberships (as is *Ophthalmology*) and/or subscriptions and paid advertisements. Most are available in hard copy and on-line.

We may be deluged by magazines dealing with ophthalmic issues and opinions. These are free, not peer-reviewed and often are published by commercial entities and



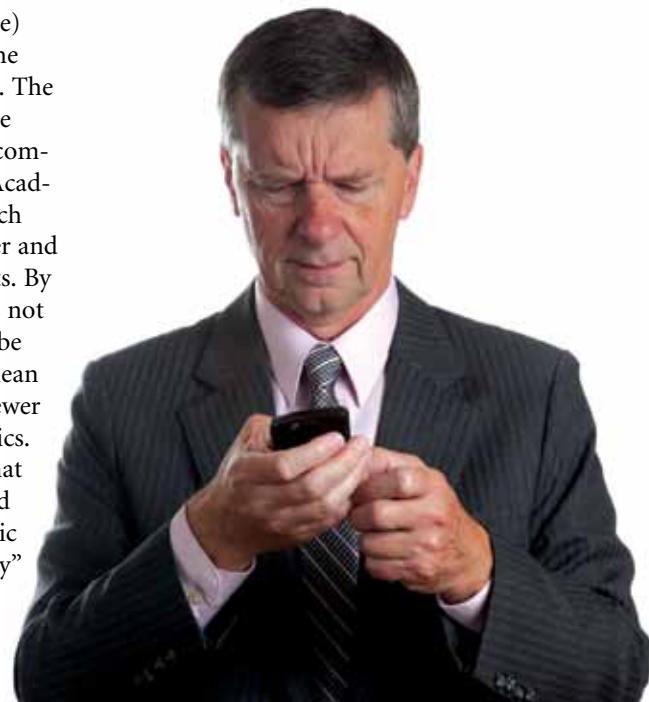
completely supported by advertising. The writers often are not M.D.s, but reporters of medical articles. Therefore, in many cases, the articles are written for industry or even by industry.

There are some magazines and newsletters (like *SCOPE*) which are without advertisements and direct revenue. These media are directed at specific audiences, serve a specific purpose and do not attempt to be peer-reviewed or truly scientific in nature.

Printed journals are becoming increasingly expensive, not just for subscriptions, but for societies to publish. Paper costs, staff salaries, mail costs, and less cash-productive advertising all contribute to the editors' dilemma. Thus we see many more journals (and newsletters like this one) going online and allowing the readership to make a choice. The Academy knows that lifetime learning is becoming more complex for ophthalmologists. Academy publications online reach round the world, are timelier and also greatly reduce mail costs. By going online at present does not mean that "hard copy" will be discontinued. Nor does it mean less editorial freedom and fewer up-to-date and relevant topics. It does indicate, however, that in a few years, stationary and hand-held portable electronic devices will become "the way" for most physicians to keep

up to date. Yet there are circumstances that generate a preference for print. For example I have been told that residents in general prefer the *Basic and Clinical Science Course (BCSC)* in print because the subjects can be read anywhere; notes can be made easily in the margins; and one doesn't have to worry about batteries. Others have said that filing printed articles also may facilitate back and forth references when doing literature research because margin notes are also easier to enter and follow.

We seniors face the greatest challenges in becoming high-tech literate. Start working on it now if you feel like a nerdy technophobe, as I do. Just ask my children and grandchildren!



BIG BANKS

The Culture of Shareholder Value

by Bond Payne

It is impossible to turn on CNBC or any other business program without hearing a corporate CEO chanting the mantra of “maximizing the shareholder value.” This is usually followed by the CEO announcing the company’s quarterly increase in revenue growth and profit margins. If the market likes the numbers, it responds by driving up the price of the company’s shares and the CEO’s stock options.

Recently, however, intellectuals and ordinary investors alike have begun to question the wisdom of “Jack Welch Capitalism.”



This phrase, coined by Richard Lambert of the Confederation of British Industry, refers to the legendary CEO of General Electric and uber-shareholder-value creator. Specifically, they have begun to question whether the performance incentives of public companies are skewed toward short-term fluctuations in the stock price and, therefore, not in the interest of long-term shareholders.

In the modern public corporation, its shareholders rarely control management. Rather,



the shareholders are represented by a board of directors who have developed compensation systems that, either intentionally or unintentionally, are adverse to shareholder interests. In the most recent examples, managers of large financial firms were incentivized to take risks that eventually led to the destruction of shareholder value and the reputation of the company. In this way, shareholders bear the risk, but have no control over management.

In addition to my title as chairman of the board, I am also a shareholder, employee, customer and family member. You might think that it could be confusing trying to remember whose interests I am supposed to be representing. The only way to satisfy the interests of all of these constituents is to remember two things:

The interests of our shareholders are inextricably linked to the interests of our clients and employees.

By doing the right thing for one constituency, you serve the long-term interest of the others.

It is impossible to imagine how we could build shareholder value without satisfying clients. And how could we satisfy our clients if our employees are not satisfied and motivated? How can we

motivate our employees without investing in their personal and financial security?

I am fortunate to represent shareholders who understand that a trust company is a long-term, relation-based business. They understand the importance of having competent employees who care about people and take care of their clients. They are committed to supporting the community and to providing services at the local level. In some ways, these attributes make us dinosaurs in a world dominated by big banks that focus on operational efficiency, proprietary products and cross-selling other services.

In the end, shareholders’ interests must be aligned with those of clients and employees, a virtuous circle that, regardless of the management fad du jour, builds real and sustained value for all parties.

Mr. Payne is Chairman of Heritage Trust based in Oklahoma City. SCOPE does not intend to advertise products or services of any organization, but the editor thought this topic is timely.



FINDING MY FATHER

Vincent P. de Luise, M.D., FACS

I thought I knew my father. I really thought I knew him. Well, I guess I have to qualify that. Dad was this extremely complex distillation of elements, especially fire and water. He was born of passionate parents on the volcanic island of Ischia, off the coast of Naples, which was certainly an environment that could have created that intensity in him, that burning curiosity for life and love and nature, especially for the sea; and right below those surfaces there was always this volatility and quickness to enrage.

Dad was a polyglot—fluent in Italian, Spanish and English, commendable in French and Portuguese and, as a man of his time, passable even in Esperanto. He once told me that he became a physician not so much because of his love of medicine, as I had done. Dad became a doctor expressly so that he could be a ship's officer, sail the Mediterranean and explore the people and cultures that had long fascinated him: on Malta and Crete and the Aeolian Isles all over the Mediterranean.

Even Dad's name had an elemental quality about it: Piero, from the Greek—petro—stone or rock. How appropriate, as in childhood he would love to hang around the craggy shoreline of his beloved island. Dad dove for sea urchin, ricci in Italian, spiny creatures that he would pluck by hand from underwater rocks, out of which he would seamlessly scoop their milt which he devoured with relish, figuratively and literally. I only learned about the creamy taste of those echinoderms as an adult through a more prosaic landlubber's introduction to uni in a sashimi bar.

Dad was a champion swimmer and prided himself on his ability to stay submerged—once for over two minutes in the pool, Houdini-like, to the utter fear, then amaze-



ment and ultimate delight of his grandchildren. Dad ate fish mostly. He stopped smoking on a dime the very day my older sister was born. There were no Nicorettes then; there was just his force of will.

For someone who claimed not to have a love of healing, Dad became a sought-after anesthesiologist. His colleagues would inevitably call him in to perform two of the most difficult techniques in the specialty: spinal anesthesia and pediatric intubations. At his retirement party, the staff gave him a gold chain on which hung a tiny, solid gold charm in the form of a laryngoscope. He wore that talisman around his neck for the rest of his life.

So Dad was this many splended thing. He was my polytropos Odysseus. I had learned about Homeric leitmotif in college—the wily, crafty, but most evidently, the multifaceted Ulysses. Yes! Multifaceted! That was my Dad, a complex crystal! So, how could I possibly know him?

And then it happened. Sometime around 1998, Dad was in his study

writing a check, and suddenly he called out for Mom. It seemed that he had forgotten how to sign his name. Mom was stunned and quietly sobbed. She didn't need a residency in neurology to know that Dad had the beginnings of Alzheimer's disease. Oh, yes, of course, Dad went through the gauntlet of many neurologists and psychiatrists, hoping for a diagnosis, any diagnosis except AD. But no. Slowly but inexorably, Dad slipped into the tenebrous branch of that tragic and unutterably painful disease. Mom and my sisters rallied, even as I withdrew because I could not bear that Dad, my Dad, our Dad was losing his amazing and beautiful mind. My polytropos Odysseus had become a one-dimensional Cyclopean.

At first, Dad railed against his disease then gradually accepted it. When they placed a bracelet on him in the rest home, he looked at it quizzically and announced to me and Mom, "Alzheimer's. That's it! That's mine!" I wept uncontrollably in front of them and this wonderful caretaker whom I didn't know. Ten painful years later, with my Dad involuted into nothing

more than a frail homunculus in his bed at home (since Mom took him back to better care for him, she said), after several hospital admissions for pneumonia, our family requested Hospice. And shortly thereafter he died. Without rage. Peacefully.

About a year after Dad's passing, on my 58th birthday, my family and I found ourselves in, of all places, a wonderful Italian restaurant in Palm Beach. As we were leaving, the maitre'de spotted a long-time customer of his, an elderly well-dressed man who was also exiting at the same time. For some inexplicable reason, he decided to introduce us. The elderly man asked my name and where I grew up. And I told him—first and last on Long Island. And then, suddenly this wizened old gentleman, out of the wondrous mystery of the universe, seemed to have a revelation. He brightened up and came close to me, and in a soft voice he whispered, "I knew your father very well. He loved medicine. We were classmates in medical school right after the war." And at that moment I realized that I too did know my father very well. Just a little bit too late.

Dr deLuise is an ophthalmologist, classical musician and gardener. He is on the clinical staff at Yale University School of Medicine. Dr. deLuise's essay was published in Connecticut Medicine, May, 2011.

As I Remember It

Vignettes of the days of training and early practice.

SCOPE solicits interesting and entertaining vignettes of readers' days of training and early practice. Please limit your submission to less than 500 words.

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PAST PERFORMANCES

Note: This is continued publication of some of the remarks of senior ophthalmologists as presented to the Academy Museum's "Oral History Project."

*William S. Tasman, M.D.,
taped October 24, 2009*

"Dr. Charles Schepens was a very demanding and sometimes intimidating teacher. We had to do very careful drawings of retinal detachments, and then Dr. Schepens would check them, and you just hoped you hadn't missed a hole. Now, no one called him by his first name, it was always Doctor Schepens. I remember one day, however, we were in the OR when I was the fellow, and a very well-known ophthalmologist—oh, I can say who it was—Herb Kaufman—was the resident. Herb already had a big reputation because of corneal herpes.

So Herb and I scrubbed in, it was a re-op, and it was one of those cases where you felt you wished you could faint and be carried out.

The case went on for hours. At one point Dr. Schepens was trying to get a suture into the scleral flap, way, way back, and he'd go from one side of the table to the other and then back. On the third try he got it in, and when he did, Herb Kaufman said, 'Charlie, I knew you could do it.' Well, you could have heard a pin drop in that OR, but no one said a thing."

*Robert Taub, M.D.,
taped October 16, 2010*

"My father was a physician. He entered the armed forces (World War 1). Oddly he was made a major in the cavalry. He had never even seen a horse, having been raised in the west side of Chicago. He served for a year and then they sent him to a special training program at Cornell.

They had a new device, called

x-rays, for locating bullets.

When I was 9 or 10, I used to make house calls with my father. He would make eight or ten calls and then the big celebration would be if we collected \$2 for one of those calls. The rest was just charity. I thought that was how medicine was practiced, really, because most of the people didn't have any money during the Depression. Services were rendered as needed.

Nonetheless I went to medical school. Shortly after World War II, I went to the Mayo Clinic and the Eye Department was housed in a Quonset hut. Later we moved into this amazing, huge, towering building which still exists. It's still the main building for the Mayo Clinic, 24 or 25 stories high. Everything was automated; it was amazing. You could step on a peddle and the examining chair would go up. If you stepped on another peddle, the chair would go down. If you wanted the lights on, you pressed a button; you want the lights off, you pressed another button.

One day, after we had been in the new building a week or two, I went to the clinic a little after lunch. This little old lady, she was probably about 90, was in the chair. And I said, 'Well, let's take a quick look.' So I turned out the lights like I always did, and I pressed the peddle and the chair started going up and soon it passed my face, and it's still going up, and it's going higher and higher, and I don't know... I thought for sure it was going through the roof. It wouldn't stop. I never had run it out to the end. Finally it locked, with the motor still on and she was way up in the air. I turned on the lights and her head is just about touching the ceiling. And I looked at that and said, 'Well, don't move. I'll be right back.' I had to find the engineer to get her down. Thank goodness it ended all right. I'll never forget that."

CATARACT

An Early Historical Perspective

When I was a resident, Sir Stewart Duke Elder was a visiting dignitary for several weeks. He made rounds with us in the morning and also gave special lectures throughout his stay. His *Text-book of Ophthalmology* volumes and updated editions had become one of the mainstays of ophthalmic education at that time. One of his lectures was on the history of cataract and I was entranced by his talk. In my files I have still that yellowed, fragile copy of notes I took. I don't know why I took notes when he talked; habit of the pre-electro-tech time, I guess.

For years, Samhita Susruta has been credited with having written the earliest known record of cataract and its surgery. More than 1500 years BCE, Susruta, a student of Dhanwantari, the father of Indian Medicine, was considered a great surgeon and wrote a treatise on surgery. To an extent, he practiced aseptic surgery by advising that the room in which surgery was to be performed be fumigated with sweet vapors and that the surgeon should have short hair and clean hands. Also he used some kind of inhalation anesthetic.

In his treatise, Susruta dealt at some length on the anatomy and

physiology of the eye. In detail, he described with some accuracy, varieties of cataract and his technique for treating cataracts by couching. He also described post-operative care and the necessity of cleanliness during this period. Susruta's knowledge was based, no doubt, on teachings that had been developed in early Hindustan.

Susruta's description of cataract as an opacity of the lens due to a derangement of intraocular fluids was lost to civilization for centuries. The lost time gave way to multiple fantasies and prejudices about the subject.

Susruta never used the word "cataract"; the name evolved as an expression for a cause for blindness over many centuries. Hippocratic writing (circa 460 BCE) did not distinguish between vision loss due to glaucoma and cataract. It was believed that a bad humor flowed down in the eye to cause blindness. (Greek for "waterfall" or "flow down" being *katarraktes*).

Long before Hippocrates, Susruta understood the value of knowledge of anatomy, physiology and pathology as foundations of surgery. Celsus (25 BCE-50 AD), apparently having studied a system of pathology and disease treatment from the Alexandrian School, and appreciating the Latin word *suffusio*, believed that there was a corrupt, thickened humor that collected in the empty space between the pupil and the lens. In his view, the lens was situated in the center of the globe. He described removing the thickened humor which obstructed the visual spirits by displacing it with a needle to another part of the eye. The Romans believed that the thickened humor resulted from a cascading of fluid in front of the lens. (Latin—*cataracta*).

Later Greek writers, including



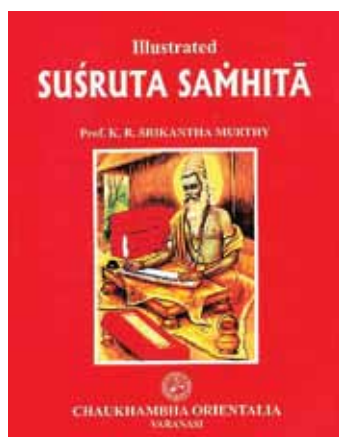
Johannes Kepler (1571-1630)

the physician, Galen (circa 130-210) developed the idea that glaucoma was a drying up of the lens itself and therefore incurable, while cataract, a bad humor in front of the lens, was curable by pushing it out of the way. To them, the lens was the essential organ of vision. This belief was maintained through the ages, even after Kepler had demonstrated that this was not the case.

Sometime after Kepler's demonstration that more than the lens was involved in the visual process, there was further dissension expressed by some post-medieval physicians about the location and purpose of the lens and the cause of cataracts. They still accepted the humoral theory of visual loss. In 1643, the Frenchman, Quarre, expressed the belief that a cataract was an opacification of the lens itself, much as Susruta had taught in ancient India thousands of years before.

Despite Rolfinck's anatomical demonstration of the opaque lens in 1656 and the observation by Maitre-Jan toward the end of the seventeenth century that couching displaced a thick, rounded substance and not a thin membrane, it was not until Brisseau, in 1705, confirmed in writing that couching displaced the lens itself that belief in the humoral

(Continued on page 12)



COMMUNICATION BARRIERS TO COMMUNICATION

W. Banks Anderson, Jr., M.D.

Remember the newspaper “commuter fold”? Most of us have ridden public transportation at least when in med school and, perhaps, some have experimented with the newspaper as an eye contact and communication barrier. Folding the paper into a strip about five inches wide, since newspapers were large in those days, it could be held just below eye level for reading its communications. Surroundings could be assessed by peeking over the top without running the risk of eye contact. Guilt for not standing up for the blue-haired lady could be avoided by appearing to be engrossed in the print. Care had to be taken to be sure that the print was not upside down. Newspapers were effective shields and commonly so employed on the buses and commuter rails I rode during my med school years in Boston.



Newsstands and newspapers are rapidly disappearing but the strategy of using a communication device as a barrier to communication remains. Only now it is electronic. With ear buds in and wires dangling out from both ears the commuter bows his or her head over the hand held device prominently displayed and displaying. The message to others is that you are not there. *Noli me tangere*. How isolated

can you be on a train or bus short of eye-closed snoring? It was easier to avoid eye contact with that newspaper but with the electronic device and ear buds the auditory communication channel is also effectively blocked. If caught peeking, gaze is instantaneously shifted to the ad placards over the windows or back down to the device. If the latter, the thumb is moved rapidly back and forth over its face to indicate concentration on the machine rather than upon the person whose gaze momentarily was locked. It is incredible how rapidly commuter hands have become infected with these glowing screens and their thumbs so balletic from massaging them.

Mornings my wife and I usually cross the street and walk along a four-mile wooded trail up to the Washington Duke Hotel where I can still get a newspaper. I was dismayed this morning at the number of walkers and runners we met who apparently could not hear the morning birdcalls because of an ear bud and a device strapped to their lower triceps. It is our custom to exchange pleasantries such as “good morning” or “beautiful day” to those whom we meet but not when we see that wire running up to the ear. We just wave. I know that at health clubs exercises are commonly done to loud rhythmic music. Perhaps bird songs are too random or runners believe that burning calories effectively requires lots of decibels.

Having something in or at the ear seems generational. On the Duke campus while walking to their next class, half of the students can be observed to have cell phones at their ears. Another ten percent wear ear buds listening to tunes. Do they notice the friends whom they meet?

But my generation also always seems to have something in or at the ear. You guessed it. They are

our hearing aids. Turning them off while leaving them in situ is a very helpful barrier at a grandchild’s dance or a basketball game or in the cheap seats on an



airplane. But spouses knowing about this practice may suspect that they are being used to tune out rather than to tune in. “Are your hearing aids on?” or “Did you turn your hearing aids off?” are inquiries addressing that barrier utility. Hearing aids also can be expected to proliferate as boomers expand the ranks of the hearing impaired. Many boomers have been blasted chronically by close range auditory assaults from ear buds and giant loud speaker towers. Shouldn’t aid manufacturers equip their products with tiny green LEDs that would politely indicate to spouses and all others when lit that: “My batteries are working. My device is on. It is not in barrier mode. I want to communicate with you.”?



2011 ANNUAL MEETING IN ORLANDO, FLORIDA



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Value – 350 courses for one low price

Individual tickets for Academy and AAOE instruction courses will no longer be sold. The Academy Plus course pass gives you access to 350 instruction courses for just \$175.

Due to their unique nature, Skills Transfer labs, Breakfast with the Experts, AAOE roundtables, ticketed special events and Coding Camp are not included in the pass. You may purchase individual tickets to attend these events.

Purchase your Academy Plus course pass for just \$175 in advance or \$225 onsite when you register for the Annual Meeting. Get your pass by September 28 to receive the advance rate. For more information, visit www.ao.org/pass

2011 Senior Ophthalmologist (SO) Annual Meeting Events—Come join us in Orlando!

The **Senior Ophthalmologist Special Program and Reception** on Monday, Oct. 24th will feature two dynamic speakers, Geoffrey C. Tabin, MD and Steven C. Schallhorn, MD. With his extensive mountaineering and international humanitarian service background, Dr. Tabin will present, *Impossible Dreams—Everest and Eradicating World Blindness*. Dr. Tabin has mountaineered on all seven continents, including the East Face of Mt. Everest. He also cofounded the Himalayan Cataract project which strives to eradicate preventable and curable blindness through ophthalmic care, education and establishment of world-class eye care infrastructure.

With a 30-year military career and having served as a Naval Aviator and TOPGUN instructor in the US Navy, Dr. Schallhorn will provide an insider's view on NASA, Jet Pilots and LASIK.

The Senior Ophthalmologist Special program is free for all attendees and spouses and scheduled from 2:30pm to 4pm with a reception to follow from 4pm–5pm.

Club Lounge: Free refreshments and internet access for all members over 60 who are wearing their "SO" ribbon. It is located in the Orange County Convention Center, Room: 208C. Hours are: Sat. Oct. 22, to Mon. Oct. 24, 9 a.m. to 5 p.m. and on Tue. Oct. 25, 9 a.m. to 3 p.m.

Tech Courses: For those of you who want to sharpen their tech skills, consider these two courses instructed by our tech guru, Andrew P. Doan, MD, PhD:
*SPE06: *Selling and Purchasing*

on eBay, Craigslist, and other Mediums: *How to Clean Your Office or Attic with Profit*, and *SPE09: *Use Blogging and Social Networking to Super Charge Your Website and Internet Marketing*. Guest presenter: Randall Wong, MD

Sign up for one of these **Senior Ophthalmologist Breakfast with the Expert** courses:

*B603: *Transitions in Practice, Slowing Down and Its Implications*—Moderators W. Banks Anderson, Jr., MD and Robert Wiggins, MD

*B604: *Stopping surgery—When, Why and What it Means to Your Practice*—Moderators William Tasman, MD and Allan Jensen, MD

*Ticketed courses are separate from the Academy Plus course pass.

8th Annual
Orbital Gala
OUR CONTINUING QUEST FOR EXCELLENCE IN EDUCATION

Sunday, Oct. 23, 6 p.m.
Hilton Orlando

Cocktail reception, silent auction,
dinner and dancing

Business/cocktail attire –
no tux or gown required!

Join us for a special evening to support the Academy's educational, quality of care research and service programs.

To learn more or purchase tickets, visit
www.fao.org.

THE FOUNDATION OF THE AMERICAN ACADEMY OF OPHTHALMOLOGY

NEWS

from the
Academy Foundation

ROTARY CLUB HOST PROJECT

Somewhere in the world,
someone goes blind every 5
seconds. A child goes blind
every minute

The Academy's Rotary Club Host Project is committed to helping reduce avoidable blindness. A collaborative effort of the Academy and Rotary Clubs, this project, begun in 2000 by Kenneth Tuck, MD, has provided educational opportunities for 67 ophthalmologists from 43 developing nations where adequate resources and education are severely limited.

Last fall, six ophthalmologists had the opportunity to visit the United States for two weeks through the Rotary Club Host Project—beginning with a visit to the community of the Rotary Club sponsor and concluding with attendance at the Academy's Annual Meeting in Chicago.

During their stay, they spent time with a local family engaging in various cultural and social activities. They learned how ophthalmology is practiced in the United States by visiting ophthalmology practices, medical centers, free clinics, and university medical schools where many were able to interact with ophthalmology residents and teachers. All guests expressed appreciation and valued the opportunity to observe surgeries and learn about new treatment practices in a local community setting.

During their attendance at the 2010 Joint Meeting of the Academy and the Middle East Africa Council of Ophthalmology, they also observed new surgical tech-

niques, discussed new therapies, participated in scientific seminars, engaged in practice management discussions, and partook of other valuable learning opportunities, while meeting with other ophthalmologists from around the world.

A 2010 Rotary Club Host Project participant shared, "I think this is one of the best educational ophthalmology programs in the world. This experience will improve my practice. Discussions, observations, getting introduced to novel diagnostic and therapeutic procedures have enriched my knowledge. It will be important to implement the results of this experience in my community and hospital. It broadened my views and encouraged me to go further. It is very valuable to discuss different approaches on how to solve problems which I have in my daily practice with experienced ophthalmologists I have been introduced to during my stay in the USA."

This program would not be possible without the partnership between the Academy and the Rotary Clubs, and support from our donors, including the International Retinal Research

Foundation that established the Alston Callahan, MD, FACS Endowment Fund with the Academy Foundation honoring the memory of their founder.

The impact of the Rotary Club Host Project lives on long after the visit to the United States. A participant stated, "The program will help me change not only my practice of ophthalmology, but also the perception of my colleagues back at home about new surgical techniques, treatment methods and practice management skills." The participants continue to share information and skills with their colleagues at home and many maintain the professional and personal relationships they developed during their stay.

If you would like information about how to support the Rotary Club Host Project and the Academy's International Outreach Program, please contact, Janice Di Natale Director of Development, at 415-447-0361 or jdinatale@aao.org. If you are a Rotarian and interested in participating in the Rotary Club Host Project, please contact Annamarie Hastings, Manager of Global Programs, at 415-447-0398 or ahastings@aao.org. Thank you.



SCOPE

Newsletter of the Academy Seniors

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Academy Seniors | RESOURCES FOR THE SENIOR OPHTHALMOLOGIST

Cataract

(Continued from page 8)

theory of cataract became obsolete. The publishing of Brisseau's work was initially discouraged by his teacher, Duverney, who felt that such a bold step might jeopardize his professional future since the old theory long had been supported by eminent physicians of the day. With the notion that those who were unchanged by his publication of a proved new discovery had more to lose than he, Brisseau withstood initial denouncement at the Académie Royale de Sciences in Paris. With the endorsements of Maitre-Jan and others his findings finally were accepted. He paid a price for his work; he lost his position in the French Academy.



Plate from a 2nd edition anthology containing a paper entitled "Sur en nouvelle methode de guerir la cataract par l'extraction du cristalin" by Jacques Daviel. Published in 1787 by Theophile Barrois Le Jeune, Paris.

The fight of Brisseau was followed by another upheaval in 1748 when Jacques Daviel (1696-1762) published an account of a purposeful extraction of a lens. Although there were several references to removal of the lens in early Arabic literature, even Galen had mentioned this as a possibility. In the eleventh century, an Arabic physician, Ammar, described attempting to remove the lens by suctioning it with a tube. There also had been references to removal of lens fragments after attempts at couching. Daviel had encountered such a problem and it was that experience that encouraged him to do a planned extraction. For a short time, others followed Daviel doing extractions, but apparently because of some complications, the practice of planned extraction was abandoned and that of couching was resumed with influential support.

Almost another century elapsed before planned cataract extraction became the procedure of choice. In the past two centuries there have been many new approaches to cataract surgery: extra capsular, intra capsular, phacoemulsification, intraocular implants, etc. The patient-public and our profession has benefited by the trials and the errors of our own experiences as well as those of our professions' forebears.

DWP