MEDICAL SCIENCE AND THE PARADOX OF TRUTH WITH A LITTLE ‘t’
Dr. L. Jarrett Barnhill

IS YOUR PRACTICE WEBSITE SAFE AND SECURE
Paul O’Neal

TEXTONICS: DEMOCRATIZING KNOWLEDGE
Dr. Assad Meymandi

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Wake County Medical Society

Contact: Paul Harrison, Executive Director
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MEDICAL SCIENCE AND THE PARADOX OF TRUTH WITH A LITTLE “t”

L. Jarrett Barnhill, MD

What on earth does this diatribe have to do with scientific medicine and evidence-based practice?

IS YOUR PRACTICE WEBSITE SAFE AND SECURE?

Paul O’Neal, President, INI

Google Chrome to Start Labelling Non-HTTPS Sites as “Not Secure”

TEXTONICS: DEMOCRATIZING KNOWLEDGE

Assad Meymandi, MD, PhD, DSc (Hon)
The Wake County Medical Society is inviting its members to write articles for upcoming issues of the Wake County Physician Magazine. Wake County Medical Society members wishing to write an article for publication are asked to submit a brief five sentence proposal.

Proposed article summaries could focus on your first person accounts of the personal side of practicing medicine (e.g., a patient overcoming all odds and achieving a positive outcome, experience with grief/overcoming grief, your best day practicing medicine, or care management success stories, etc.) or any other human interest story that might appeal to our readership—keeping in mind that anything resembling promotion of a current practice or practitioner, or taking a political stance would not be usable, with the final say on such matters resting with the editorial board.

Please email your brief proposal to Paul Harrison, editor, by September 7, 2018 at pharrison@wakedocs.org. We would like to include your article in our next publication—October 2018 which will be posted on our website. Thanks!

Paul Harrison
L. Jarrett Barnhill, MD
is a professor of Psychiatry at the UNC School of Medicine and the director of the Developmental Neuropharmacology Clinic within the Department of Psychiatry. He is a Distinguished Fellow in the American Psychiatric Association and Fellow in the American Academy of Child and Adolescent Psychiatry.

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Paul O’Neal, President/Owner
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has 30-years of IT experience with Fortune 500 companies, as well as, small and medium businesses in the areas of data and telecommunications, enterprise network infrastructure design and implementation, Windows desktop and server, data security and HIPPA compliance.

OUR PREVIOUS ISSUES ARE AT YOUR FINGERTIPS
ISSUES ARE EASY TO FIND AND ACCESS AT WAKEDOCOS.ORG
One of the most exciting events of the twenty first century which holds much promise for the future of this country and the world is Textonics. The first half of the twentieth century saw many inventions including the flight of the Wright’s brothers, Salk vaccine, and the discovery of antibiotics. The second half of the century saw the stunning and most important discovery in the ten-thousand-year history of Neolithic man, namely DNA, in February 1953. Its discoverers, American James Watson and British Francis Crick were awarded the Nobel Prize for Chemistry in 1962.

Already 16 years into the 21st century, we have begun to see the possibilities of offering mankind the most important undertaking of Textonics. It is digitizing the literature of the world and making it available to every child even in the most remote villages in all corners of the world. Just think, it will bring the content of the world’s libraries to students everywhere. One is reminded of Al Gore’s comment, several years ago, that we should strive to bring the content of the Library of Congress to every student in America. The Librarian of Congress, James Billington, who stepped down from his post in September 2015, in several commentaries emphasized the staggering problem of copyright laws, just to mention one drawback. But over the past several years an enormous amount of progress has been made to overcome these barriers. There are a number of incentives in the form of awards created by academic centers and devoted to the fostering and encouragement of rapid development of this field. Among these awards are the A. R. Zipf Award and the Richard Lyman Award given by the National Humanities Center, RTP.

Dr. Jerome McGann, Chair, Department of Textonics at the University of Virginia was the recipient of the

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In our era, the search for universal Truths (capital “T”) seems like a hopeless journey that would surely excite any present-day Don Quixote. Many of our Truths are not science but personal opinions or religious dogma. There are many who believe that only “old-time religion” can lay claim to such unchanging knowledge, but archeologists and historians are always nibbling around the foundations. Others take relativistic perspectives in which what we know is relative to differences in time, place, circumstances, socio-cultural forces and new insights wrought by social change, or the latest scientific/technological advances. Variations of these dichotomies are ancient, and once vexed philosophers, tragedians and poets well before the great Socrates/Plato-Sophist debates. The introduction of the works of Aristotle created an equally complex set of issues the dominated Medieval thinkers (I have faith that I may understand vs I need to understand to have faith). The process continues to involve modern day self-proclaimed populists, and the hoard of pundits, soothsayers, and self-anointed prophets who interpret the vast middle ground of nonscientist, common folk. Metaphorically, our world is a series of often disjointed, dramatic scenes with only antagonists and protagonists. The chorus of the people with short attention spans reverberates with the dueling characters.

Many religious traditions proclaim that beliefs are the universal Truths. That position leaves the perplexed or doubters in the darkness, cutoff from the only sources of true enlightenment. On the other hand, animists, polytheists and the unsaved proclaim a different collection of myths and truths. In a polarized world, we label these folks as ignorant or “rubes”. In fanatic religious circles, the scientists are allies with the dark side of the force, bent on corrupting our youth. At the other pole are zealots in the religion of science who feel surrounded by idiots, and see science as the only way to define what is true. It seems as if the hope for a big tent sags around these two tent poles.

A noted person once quipped “I love illiterate people” suggesting that too much education also corrupts. This
leaves the rugged individualists and solipsists who claim self-enlightened based on experience and common sense. Add a dose of anti-intellectualism and authoritarianism and any compromise lost in storm of self-proclaimed knowledge/distrust in all things scientific an educated/economic elite who disdainful of the groundlings. So instead of searching for a consensus we cast our lots with fragmentation and growing tribal belief systems. In other words, our mantra might sound like this: “don’t the facts get in the way of a good story, or “only an idiot would believe that climate change I not real”. Although it seems more intense today, we seem to be rehashing ancient conflicts over the role of absolute Truth arising from experience and authority versus an experimental or mathematical worldview to deal with what is challenging, complex and perplexing.

What on earth does this diatribe have to do with scientific medicine and evidence-based practice?

Prior to our modern era, science, magic and religious beliefs were like quarks in a proton or neutron. When left alone they were an “inseparable” part of the culture-bound ideas about how the world worked. Historically, the problem arose when we began the process of separating them (the increasing energy created when gluons are “stretched”). Today, magic is little more than entertainment yet many people still practice their superstitions and rituals. Anthropologists tend to define magic in functional terms- a means of coercing the people and nature to behave as we wish, need or command them to do. Most of our magic lies on a continuum ranging from time-limited, developmentally-based rituals observed in small children; pregame rituals among athletes; rooting for sports teams during close games, and in the extreme, the rituals in obsessive-compulsive and related disorders. Strip away our ethnocentrisms and many of our most cherished religious rituals still have an aura of magic embedded in them. A cynical Mark Twain once quipped: “faith is believing in something that you know ain’t so”. Put another way, magic is science that we cannot measure or quantify (metaphysics), do not understand (a favorite theme in science fiction), or is result of supernatural intervention (miracles). In short, magic falls short of an scientific evidence base, but try to explain the photoelectric effort to a child who wonders why the door to the grocery store open by itself. There is a degree of magic in

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Google Chrome to Start Labelling Non-HTTPS Sites as “Not Secure”

By Paul O’Neal, President, International Networking, Inc.

The purpose of this article is to help you ensure your website is a secure and trusted website for your patients to visit. Google has big changes in store for the way their Google Chrome browser will handle access to websites in the very near future. The first change will occur in July 2018 with the release of Chrome 68. Google Chrome is by far the most widely used browser on PC’s and laptops with its market share around 60% and the next closest competitor coming in around 10%.

But first a little core technology background. Hypertext Transfer Protocol (HTTP) was created in 1989 and is the foundation of communication for the World Wide Web.

When the World Wide Web (www) came on the scene in 1989 users needed a friendly interface which would allow them to view pages graphically on the internet, thus in 1990, the birth of the first internet browser.

Later in 1994, Netscape Communications would go on to create for its Netscape Navigator a HTTP Secure (HTTPS) web browser. Originally, HTTPS was used with the SSL protocol. As SSL evolved into Transport Layer Security (TLS), HTTPS was formally specified by RFC 2818 in May 2000.

As an example. If you want to see what model cars Ford currently has to offer you most likely would open your favorite internet browser and type “Ford” in the browser bar, press enter and voilà a world of information appears.

But here is what actually happens. Like 90% of internet users you probably used Google as your search engine. If you are a Google user when you searched for “Ford” Google returned search results of the biggest players (aka: ad payers) at the top of the search results. If you were to click on the first Ford result at the top of the page you would seemlessly
be redirected to https://www.ford.com.

Google uses a variety of signals and algorithms to calculate search engine positions in order to determine what/who you see when you enter a query. Which brings us to Google SEO (Search Engine Optimization) and analytics. In the early days of the Internet all this convenience did not exist. If you wanted to access a site or page you had to specify a protocol such as ftp or http followed by :// then type the name of the computer usually www or ftp, the domain name followed by the extension (com, edu, org, net, etc.) looking something like this: http://www.exampdomain.com.

Thankfully, many strides have been made requiring less information to be typed in the browser bar because programmatically values have been set so there is no longer a need to include the www OR http because the DNS and/or the web host should configure how to handle web traffic. If we want direct access to a website and it is properly configured simply typing Ford.com will take us directly to their website.

As mentioned earlier, Google has plans to begin enforcing stricter security policies with the release of Chrome 68. If you have Chrome installed on your computer(s) it should roll out to end users automatically.

But now lets talk about how this will affect your practice’s website and possibly patient portals. If your practice/business website isn't configured properly then your patients/site visitors will see a "Not secure" warning in the browser bar which will potentially expose them to security breaches and insight FUD (fear, uncertainty and doubt!)

It’s quick and easy to see if your website is set up correctly. Simply follow the steps below:

1. Ensure your website has a valid and trusted SSL certificate installed. For this test, I strongly recommend you use a Google Chrome browser. In the browser bar type: http://www.ininc.com (of course you will type http://www.your own domain name and specific extension such as org, edu). If you see a lock and the word Secure you’re in good shape.

Notice in the example below even though I sited that you should type in http:// my site automatically redirected to https://

If you see he words “Not Secure” then you have some work to do in order for your site to be redirected correctly. When you contact your tech support regarding this issue make sure you also have them ensure your website has a valid and trusted SSL certificate installed. If you do find yourself needing to acquire an SSL Certificate and your website does not directly handle the processing of money you probably do not need to buy an expensive certificate that a hosting company may try to upsell you. The main free CA or Certificate Authority is Let’s Encrypt. https://letsencrypt.org/

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The Wake County Medical Society sponsored a luncheon at the North Carolina Museum of Art on Sunday June 24, 2018 and a tour of the current exhibit “Here You Are: Light, Color and Sound Experience”.

The exhibit displayed art in many forms by approximately eighteen different artists. Each exhibit required its own unique and discrete space and each exhibit provided a creative stretch for the viewer. Participants included: Dr. Assad Meymandi, Ms. Terry Thompson, Dr. John Perry, Mrs. Elaine Perry, Dr. Robert Johnson, Dr. Doug Holmes, Dr. Rebecca Oyler, Mr. Michael Oyler, Dr. Bob Munt, Mrs. Helen Pettiford, Mr. Paul Harrison and Mrs. Cora Harrison.

Dr. Mina Levin, (retired) and a senior docent at the Museum of Art provided an introductory lecture about the exhibit prior to the tour. The event is part of a series by the Wake County Medical Society with a focus on continuing education combined with social opportunities for its members.
The Wake County Medical Society had its inaugural book club dinner meeting April 24, 2018. Our first book discussion was *Astrophysics for People in a Hurry* by Neil DeGrasse Tyson. The conversation was lively and the meal delectable. The group found this book overall tackled a great range of subjects...with humor, humility, and humanity.

Attendees included (left to right): John Perry, MD, Willard Kennedy, MD, Bob Bilbro, MD, Subhash Gumber, MD, Doug Holmes, MD, Dale Oller, MD, Rebekah Steele, MD, Robert Munt, MD and Paul Harrison.

Please join us for our next Book Club meeting on July 24, 2018 where we will discuss *The Great Influenza* by John M. Barry. See inside cover for more information.
science and technology that is beyond our knowledge even though we are assume that some expert knows how it works. In these cases, faith (or even magic) are alive and we temporarily suspend disbelief to get inside the grocery store. So, if magic is passé, and religion, a different set of fact statements, then what is science? In many situations, science is a materialistic, rationalist explanation for a collection of fact statements, experimental discoveries, and models for understanding how the world works. Functionally, science works and its effects can tested, objectively observed and measured. The history of science on the other hand, is not so straightforward. Over time, we witnessed many side paths and blind alleys in our historical journey. Much of today’s neuroscience is the result of describing, categorizing and analyzing, lagging behind is a deeper understanding of how all of this comes about. We are dabbling in Artificial intelligence (AI) but still “have mile and miles to go before we sleep”. We are creating the environments for self-organizing neurons but no one has made a copy of Mozart’s, Einstein’s or Shakespeare’s brain. Cloning captured our attention with Jurassic Park/World but we are toddlers when it comes to understanding the complexity of gene regulation during brain development, maturation and the multitudinous networks and interconnected circuits. We are miles away from understanding the minute-by-minute gene X environment interactions that allow us in the middle of physics class to quickly shift into default mode and think about how my elementary schoolmate, Eddie (aka Tomcat) could eat three school lunches without dying.

For many of us, science is so compartmentalized, complicated and dependent on experimental procedures, mathematics/statistics, and phenomena that many of us will never understand or grasp. To all of us, there are many things accepted based on faith (“a priori). For example, Newton used many priori “givens” in his models of gravity. Newton explained what gravity did and how it behaved, but never attempted to step beyond his unusual theology to explore what gravity truly was. Einstein resolved this conundrum with gravity by considering the bending of space-time. His gedanken experiment remained unproven until the detection of gravitational lensing during a total eclipse of the sun in 1919. That was one-step towards explaining what gravity is. But then, along came the gang of quantum physicists to muddy the waters for our understanding of gravity at a subatomic level.

The paradox of our time is how to link what we know with how we came to know it. For example, what is the relationship between new ideas generated by single case designed clinical trials with the gold standard of RCT’s and meta-analyses that are the fuel for evidence-based practices. Some mortals flounder and in desperation consider them to be “Non-overlapping magisteria”- a term borrowed by Stephen J. Gould to describe the domains of science and religion. But others consider the interaction between these two approaches as a form of scientific symbiosis where neither can survive without the other. This brings to basic differences between inductive/deductive reasoning, Bacon and Descartes, and search for new knowledge versus confirmation and proof that what we believe to be true can withstand the challenge of additional study. Medical Science occurs in a culture that includes many religious beliefs about the nature of illness and its treatment. In this sense, science is disprovable at many levels and any claim that our findings are “fundamental” Truths, may last no longer than the next new technology or new experimental.

But there is another human factor- we also tend to accept or refute new knowledge based on how it matches or agrees with our pre-existing beliefs. The search for scientific truths is a bit like the alchemist dream but the philosopher’s stone or the elixir still elude us. So, after a long-winded introduction we are ready to take multi-faceted (or confusing) look at the world of evidenced based models in our brave new world of scientific medicine. Unfortunately, we are out of time and space. This article is like my grandpa’s stories: we will have to wait to hear the ending next time. §
2002 Lyman Award. He has a large department with no fewer than 16 doctoral candidates working on various aspects of this exciting field. The 2003 Lyman Award winner is Dr. Roy Rosenzweig of the College of Arts and Sciences of George Mason University. He is known as “Digital Democratizer”. The Award ceremonies were held in the Great Hall of the Library of Congress, an elegant venue. Those of us privileged to attend were witness to an exciting event not dissimilar to the first flight of the Wright Brothers at Kitty Hawk, North Carolina.

The field of Genomics, which has produced eight Nobel Prize winners, and Proteomics, with its three Nobeleurs, are merging with the field of Textonics (no Nobel Prize yet) and asymptotically approaching the holy grail of artificial intelligence.

One of the best kept secrets of NCSU is its program of Textonics. Through an intense labor of love and costly initiatives North Carolina State University’s D.H. Hill Library has become a leader in the digitizing world. In my travels, I have spent much time at the British Library, conferring with its Director and the person in charge of its information technology and digitization. I can tell you that we are far ahead of UK. I am also in touch with the University of Paris and the Sorbonne. They, too, are nowhere near where NCSU and UNC Libraries are.

NC’s program of digitization is admirable and most progressive. We applaud the leadership of Susan Nutter, her able staff, and the leadership of Chancellor Randy Woodson. In addition, University of North Carolina at Chapel Hill has initiated a program where documents are not only digitized but according to its program director, Dr. Nick Graham, “sometimes we need to take the archive to the people...” What they are doing in UNC and NCSU Libraries in archiving books and historical documents to the public reminds me of the days doctors made house calls. Nick Graham and his staff will deliver digitized material to the public and communities, from Manteo to Murphy, on demand. So, no school child left behind because of lack of material. Congratulations to the UNC Library system and its leaders. §

*The writer is Adjunct Professor of Psychiatry, University of North Carolina School of Medicine at Chapel Hill, Distinguished Life fellow American Psychiatric Association, and Founding Editor and Editor-in-Chief, Wake County Physician Magazine (1995-2012). He received Raleigh Medal of Art in 2001, inducted to Raleigh Hall of Fame 2013, elected Lifetime Trustee, North Carolina Symphony in 2015, and 2016 recipient of NC Award, Fine Arts.

Wake County Physician Magazine (WCPM) is a publication for and by the members of the Wake County Medical Society. WCPM is a digital, quarterly publication published January, April, July, and October.

All submissions including ads, bio’s, photo’s and camera ready art work for the WCPM should be directed to:

Tina Frost
Graphic Editor WCPM
tina@tinafrost.com  919.671.3963

Photographs or illustrations:
Submit as high resolution 5” x 7” or 8” x 10” glossy prints or a digital JPEG or TIF file at 300 DPI no larger than 2” x 3” unless the artwork is for the cover. Please include names of individuals or subject matter for each image submitted.

Contributing author bio’s and photo requirements:
Submit a recent 3” x 5” or 5” x 7” black and white or color photo (snapshots are suitable) along with your submission for publication or a digital JPEG or TIF file at 300 DPI no larger than 2” x 3”. All photos will be returned to the author. Include a brief bio along with your practice name, specialty, special honors or any positions on boards, etc. Please limit the length of your bio to 3 or 4 lines.

Ad Rates and Specifications:
Full Page $800
1/2 Page $400
1/4 Page $200
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NOTE: If you check your website before the Chrome 68 rollout you will only see :
The words Not secure will not appear until after the rollout.

2. Ensure your hosting service is set up to drive all traffic to use https. You will need to contact your hosting company to verify this is done.

3. Lastly make sure all your SEO is directed to and using the https protocol (https://www.yourdomain.com). If your website and hosting is set up correctly then searches should automatically be redirected; however, if you continue to use and promote http:// Google will deprioritize your website which will adversely affect your ranking.

That's it!!

I have also included an example below of a current Google Chrome 67 browser bar verses what the browser bar will look like with the July Google Chrome 68 rollout. Notice they have added “Not secure” which is exactly what your patients/visitors will see. If your patient/visitor clicks the Not Secure tab they will see the following message:

Do you think this message may scare away more than a few of your website visitors. I certainly wouldn’t risk it.

As I was writing this article I researched some Wake County medical practices and noticed quite a few that are not setup correctly. I hope this article has given you the information and motivation you need to get your website ready for the Big Google Chrome 68 rollout.

Google has been deprioritizing websites that don’t use https since 2014 so your search results have been suffering if you have been using http but with this new security push you run an even greater risk of losing precious traffic to your site if you can’t provide a secure and trusted website for your patient’s to visit.
Come Join Us!

Wake County Medical Society
Military Interest Group
For WCMS members who have prior military experience.

Suggestions and input from military members for outings, meetings, and events is welcomed, encouraged, and essential.

For time and location send an email with contact info & branch of service to: dkholmesENT@aol.com

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ENT & Audiology Associates PLLC
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CURRENT PROGRAMS

Project Access - A physician-led volunteer medical specialty service program for the poor, uninsured men, women, and children of Wake County.

Community Care of Wake and Johnston Counties CCWJC has created private and public partnerships to improve performance with disease management initiatives such as asthma and diabetes for ACCESS Medicaid recipients.

CapitalCare Collaborative - The CCC program is a membership of safety net providers working corroboratively to develop initiatives to improve the health of the region’s medically underserved such as asthma and diabetes for Medicaid and Medicare recipients.

WHY JOIN

Membership in the Wake County Medical Society is one of the most important and effective ways for physicians, collectively, to be part of the solution to our many health care challenges.

A strong, vibrant Society will always have the ear of legislators because they respect the fact that doctors are uniquely qualified to help form health policies that work as intended.

It’s heartening to know the vast majority of Wake County physicians, more than 700 to date, have chosen to become members of the Wake County Medical Society.

HOW TO JOIN

To become a member of the Wake County Medical Society contact Paul Harrison at pharrison@wakedocs.org or by phone at 919.923-2442

A portion of your dues supports to the volunteer and service programs of WCMS. Membership is also available for PA’s. There is even an opportunity for your spouse to get involved by joining the Wake County Medical Society Alliance.

WCMS MISSION

To serve and represent the interests of our physicians; to promote the health of all people in Wake County; and to uphold the highest ethical practice of medicine.
ENJOY THE REWARDS OF BEING A MEMBER

JOIN TODAY!

The Wake County Medical Society (WCMS) is a 501 (c) 6 nonprofit organization that serves the licensed physicians and physician assistants of Wake County. Chartered in 1903 by the North Carolina Medical Society.

BENEFITS OF MEMBERSHIP

Service Programs - The spirit of volunteerism is strong in Wake County. Hundreds of local physicians volunteer to help our indigent. The Society coordinates several programs that allow low income individuals access to volunteer doctors and to special case management services for children with diabetes, sickle cell anemia or asthma.

Publications - Members receive the peer-reviewed The Wake County Physician Magazine four times a year, and we keep you informed regularly via pertinent emails. The magazine focuses on local health care issues in Wake County, the Wake County Medical Society and the WCMS Alliance, a companion organization composed of physician spouses and significant others.

Socializing with your physician colleagues - Many physicians feel too busy to do anything except work long hours caring for patients. But, the WCMS provides an opportunity for physicians to nourish relationships through social interaction with one another at our dinner meetings featuring prominent speakers and at other events.

Finally, joining the WCMS is plain and simple the right thing to do - Physicians and the community benefit from our membership and our leadership in local affairs.