"There is just one thing I can promise you about the outer-space program - your tax-dollar will go further."

~ Wernher von Braun (1912 - 1977), German rocket scientist

Phactum

The Newsletter and Propaganda Organ of the Philadelphia Association for Critical Thinking January 2013

editor: Ray Haupt email: phactpublicity@aol.com
Webmaster: Wes Powers http://phact.org/

PhACT Meeting - Saturday, January 19, 2013

at Community College of Philadelphia in Lecture Room C2-28 in the Center for Business and Industry at the corner of 18th and Callowhill Streets. At 2:00 PM.

Parking is available from 12:30 to 6:00 PM in the surface parking lot on 17th Street. All are Welcome. This event is Free and Open to the Public. Handicapped accessible.

Dr. David Cattell, Chairman of the Physics Department of Philadelphia Community College, will host Dr. W. Joseph Campbell, a Professor of Communications at American University in Washington, DC.

"You mean it's not true? Busting media myths."

Communications professor and author W. Joseph Campbell debunks prominent media-driven myths -- those well-known stories about and/ or by the news media that are widely believed and often retold but which, under scrutiny, dissolve as apocryphal or wildly exaggerated. These myths include the hero-journalist interpretation of Watergate, the famous "Cronkite Moment" of 1968, and the myth of superlative reporting in the aftermath of Hurricane Katrina -- all of which are addressed in Campbell's 2010 book, *Getting It Wrong: Ten of the Greatest Misreported Stories in American Journalism*. There will be book sales and signing after the lecture.

Fables should be taught as fables, myths as myths, and miracles as poetic fantasies. To teach superstitions as truths is a most terrible thing. The child mind accepts and believes them, and only through great pain and perhaps tragedy can he be in after years relieved of them.

Hypatia of Alexandria

(Continued on page 2)

"The liberty of the press is a blessing when we are inclined to write against others, and a calamity when we find ourselves overborne by the multitude of our assailants." ~ Samuel Johnson, (1709 - 1784), English poet, essayist, moralist, literary critic, biographer, editor and lexicographer.

W. Joseph Campbell is a tenured full professor in the School of Communication at American University in Washington, DC. He joined the University's faculty in 1997, after more than 20 years as a newspaper and wire

service journalist. Dr. Campbell's award-winning career in professional journalism took him across North America and to Africa, Asia, and Europe. He reported for the Cleveland Plain Dealer, the Hartford Courant, and for the Associated Press in Switzerland, Poland, and West Africa.

He earned his doctorate in mass communication at the University of North Carolina at Chapel Hill in 1997, and soon after joined at faculty at American University.

Dr. Campbell is the author of five books, all of which have been published since 1998. His most recent work, *Getting It Wrong: Ten*

of the Greatest Misreported Stories in American Journalism, debunks 10 prominent media-driven myths. Getting It Wrong was published in 2010 by the University of California Press and won the Society of Professional Journalists' national Sigma Delta Chi award for Research about Journalism.

The book was critically well-received. Commentary magazine said of Getting It Wrong: "It may be the best



"Frank, leak to the tabloids that these slow moving broccoli flakes cure cancer."

book about journalism in recent memory; it is certainly the most subversive." The Wall Street Journal called the book "entertaining and persuasive," adding:

"With old-school academic detachment, Mr

Campbell ... shows how the fog of war, the warp of ideology and muffled skepticism can transmute base journalism into golden legend."

Among Dr. Campbell's other books are *The Year That Defined American Journalism: 1897 and the Clash of Paradigms* (2006) and *Yellow Journalism: Puncturing the Myths, Defining the Legacies* (2001).

Dr. Campbell is a past winner of the American University student government's "faculty member of the year" award. He also has received the University's faculty award for service to the AU community and the University award that recognizes scholarly accomplishment by an

associate professor. He was promoted to full professor in 2009.

Dr. Campbell has taught 17 different courses at American University, including "Media Myth and Power," an undergraduate seminar based on his research about media-driven myths. He also has taught "Seminar in Public Affairs," "Contemporary Media in a Global Society," "Dissident Media," "Decisive Moments in Communication," among others.

He writes frequently about media-driven myths at his Web log, Media Myth Alert.

http://mediamythalert.wordpress.com/

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The strange American ardor for passing laws, the insane belief in regulation and punishment, plays into the hands of the reformers, most of them quacks themselves. Their efforts, even when honest, seldom accomplish any appreciable good. The Harrison Act, despite its cruel provisions, has not diminished drug addiction in the slightest. The Mormons, after years of persecution, are still Mormons, and one of them is now a power in the Senate. Socialism in the United States was not laid by the Espionage Act; it was laid by the fact that the socialists, during the war, got their fair share of the loot. Nor was the stately progress of osteopathy and chiropractic halted by the early efforts to put them down. Oppressive laws do not destroy minorities; they simply make bootleggers.

H. L. Mencken (1880 - 1956)
 Editorial in The American Mercury (May 1924),

Books by Dr. W. Joseph Campbell



Getting It Wrong: Ten of the Greatest Misreported Stories in American Journalism

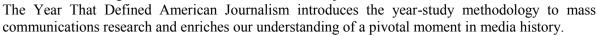
Publisher: University of California Press; 1 edition (July 12, 2010) ISBN-10: 0520262093 ISBN-13: 978-0520262096 Paperback: 288 pages

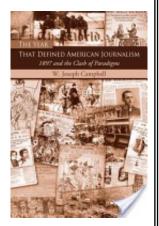
Did the Washington Post bring down Richard Nixon by reporting on the Watergate scandal? Did a cryptic remark by Walter Cronkite effectively end the Vietnam War? Did William Randolph Hearst vow to "furnish the war" in the 1898 conflict with Spain? In Getting It Wrong, W. Joseph Campbell addresses and dismantles these and other prominent media-driven myths--stories about or by the news media that are widely believed but which, on close examination, prove apocryphal. In a fascinating exploration of these and other cases--including the supposedly outstanding coverage of New Orleans during Hurricane Katrina--Campbell describes how myths like these can feed stereotypes, deflect blame from policymakers, and overstate the power and influence of the news media.

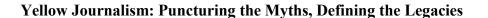
The Year That Defined American Journalism: 1897 and the Clash of Paradigms

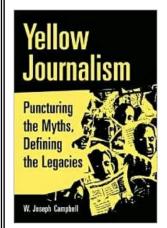
Publisher: Routledge; 1 edition (June 25, 2006)
ISBN-10: 0415977037 ISBN-13: 978-0415977036 Paperback: 320 pages

The Year that Defined American Journalism explores the succession of remarkable and decisive moments in American journalism during 1897 – a year of significant transition that helped redefine the profession and shape its modern contours. This defining year featured a momentous clash of paradigms pitting the activism of William Randolph Hearst's participatory 'journalism of action' against the detached, fact-based antithesis of activist journalism, as represented by Adolph Ochs of the New York Times, and an eccentric experiment in literary journalism pursued by Lincoln Steffens at the New York Commercial-Advertiser. Resolution of the three-sided clash of paradigms would take years and result ultimately in the ascendancy of the Times' counter-activist model, which remains the defining standard for mainstream American journalism.









Publisher: Praeger (March 30, 2003) ISBN-10: 0275981134 ISBN-13: 978-0275981136 Paperback: 240 pages

This offers a detailed and long-awaited reassessment of one of the most maligned periods in American journalism—the era of the yellow press. The study challenges and dismantles several prominent myths about the genre, finding that the yellow press did not foment—could not have fomented—the Spanish-American War in 1898, contrary to the arguments of many media historians. The study presents extensive evidence showing that the famous exchange of telegrams between the artist Frederic Remington and newspaper publisher William Randolph Hearst—in which Hearst is said to have vowed to furnish the war with Spain—almost certainly never took place. The study also presents the results of a systematic content analysis of seven leading U. S. newspapers at 10 year intervals throughout the 20th century and finds that some distinguishing features of the yellow press live on in American journalism.

Letters to the Editor

Editor: There is an article entitled "The Island Where People Forgot to Die" in the 24 October 2012 New York Times Magazine. The article is about "islands" (literally or figuratively) where people enjoy extraordinary longevity, such as the Greek Aegean island of Ikaria (the island of the title), Sardinia's Nuoro Province, Okinawa, Costa Rica's Nicoya Peninsula, and Seventh-day Adventists in Loma Linda, California. The author of the article is Dan Buettner, who, with coworkers and the support of the National Geographic Society, has been trying to find the keys to a long and healthy life.

They began by identifying a cluster of villages in Sardinia with the world's highest concentration of male centenarians. On a map they drew a boundary in blue ink and began referring to the area inside as a "blue zone" (cf. our "Blue Route"). Buettner wrote a book called *Blue Zones* and maintains a website www.bluezones.com. Buettner acknowledges that the field of extraordinary longevity has been marred by a number of false positives, such as Ecuador's Vilcabamba Valley, Pakistan's Hunza Valley, and the Caucasus Mountains of Georgia, where, for a number of reasons, people claim to be older than they really are. So Buettner maintains a healthy skepticism about such claims, but he insists the Blue Zones he has identified are rigorously well-documented.

All the same, on his website (at http://www.bluezones.com/live-longer/power-9/) he states that "most of the answers lied [sic] within their lifestyle and environment." That's what it said when I last checked; it can be changed but it can't be denied—I've got a screen shot. Makes me wonder if Buettner really believes what the Ikarians and others are telling him!

Howard J. Wilk

Philadelphia

Editor's note: Longevity is certainly an interesting topic and was addressed in somewhat different terms in Paul Schlueter's essay "Long Term Care vs. Dementia" in the October 2012 Phactum.

Jonathan Swift also addressed the question of longevity in his 1726 satire "Gulliver's Travels", Book III, when he introduces the Struldbruggs, an odd race who are immortal, but lacking eternal youth must endure endless life without strength and vitality.

"Every man desires to live long, but no man would be old." ~ Jonathan Swift

Editor:In the latest issue of *Phactum* various contributors discussed demarcating between science and pseudoscience by using falsifiability in reaction to the interesting PhACT lecture by Professor Michael D. Gordin on Immanuel Velikovsky. I think using that criterion for differentiation is misguided. First, according to the Duhem-Quine thesis, no hy-

pothesis can be tested in isolation, hence, if any test fails then we can always still accept the hypothesis and instead reject one or more background assumptions. And, second, in spite of the Duhem-Quine thesis, both mainstream scientific and pseudoscientific contentions are commonly thought to be falsifiable unlike a metaphysical claim like angels are in heaven.



In 1914 Edgar Rice Boroughs wrote of a land at the hollow center of the Earth called Pellucidar. It was a stone-age time in a place inhabited by muscle bound men, exotic women, and strange beasts to delight cryptozoologists.

Nonetheless, while both mainstream science and pseudoscience employ the scientific method and are commonly assumed to make claims that are falsifiable, we can distinguish between them by noting that mainstream science is acceptable to the scientific community while pseudoscience is not. The scientific community can be seen as including those with the appropriate degrees from the appropriate colleges, people who have won the relevant science awards and those who hold the proper academic positions. Theories that are not generally accepted by mainstream science may still be considered

mainstream scientific theories, reasonable people can disagree, but theories that are unacceptable to mainstream science, like the hollow Earth theory, are pseudoscience. The hollow Earth theory is thought to be pseudoscientific not because it is thought to be incapable of being falsified or even because it is thought to be false but because the mainstream scientific community considers it to be beyond the pale. And pseudoscientific positions can become mainstream scientific positions as pointed out by a gadfly at the lecture who asked about the theory of continental drift which was once anathema to the scientific community but today is accepted by mainstream science.

Don Nigroni Glenolden, PA

Editor: Re: Karl Popper on the theory of evolution (*Phactum* November/December 2012 p. 2): The testability and falsifiability of the theory of evolution is something I've thought about. As a practical matter, it seems not to be so, because whatever we find in nature, we interpret it as being confirmatory of, or at least consistent with, the theory of evolution.

Say you discover a new species of animal. Is it brightly colored? That's to facilitate intraspecific communication, e.g. for attracting a mate. Is it dully colored? That's to hide from

predators or prey. It seems like nothing we can conceive of finding can contradict the theory of evolution.

And yet, I think the theory of evolution is a logical consequence of two other "theories" that *are* testable and falsifiable. The first is that progeny are similar to but not always identical to their progenitors, because of mutation and sexual reproduction (and other processes that mix genes). The second is that some living things survive better than others in their environments.

I can conceive of a world so resource-rich that there is no competition and everything survives and reproduces (or lives forever). I can also conceive of a world (could be the same world) where genetic material is copied with 100% fidelity, or a world where the copying of genetic material is so unreliable that an organism with some adaptive trait is no more likely than any other organism to pass on that trait (a process that can hardly be called "reproduction"). I claim that there's no evolution occurring on these worlds. Of course, we (and other complex life) are unlikely to have arisen on such worlds to observe our surroundings (a case of the weak an-

thropic principle). Any intelligent life that did exist on worlds of this sort would have a good case for believing in a Creator!

Howard J. Wilk Philadelphia

Editor:

Re: "Proof of the afterlife" (*Phactum* November/ December 2012 p. 5): I would like to point out that these experiences of an afterlife, if real, are not consistent with the personal God of the Western monotheistic religions who provides a heaven or hell for dead people only and who is omniscient, omnipotent, and omnibenevolent (all-knowing, all-powerful, and all-good), specifically the omniscient part. An omniscient God would know these people weren't really dead and hadn't come to heaven to stay!

Truth or Coincidences? Howard J. Wilk Philadelphia

"Words - so innocent and powerless as they are, as standing in a dictionary, how potent for good and evil they become in the hands of one who knows how to combine them." ~ Nathaniel Hawthorne

There is power in words and 19th century American fiction writer Nathaniel Hawthorne understood that very clearly. Few possess fluent writing skills comparable to Hawthorne but we all can use the power of words if we so desire and apply our minds. We invite you as a Phactum reader to take pen to paper and articulate thoughts about some matter of life or science that you may have been pondering. Why not share your ideas in a letter or article in Phactum? Subject matter is nearly unlimited and may encompass aspects of science, pseudoscience, Bigfoot, mermaids, philosophy, history, bogus medicine, instructions on how to be a charlatan, and on and on.

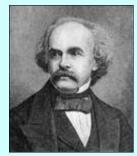
We would very much like participation from Holocaust Deniers, naturopaths, Intelligent Design enthusiasts, fortune tellers, and others routinely derided by Skeptics. Student letters and essays are especially welcome. Critical Thinking combined with lucid writing is a great mental self-improvement exercise. You might even wish to entertain some thoughts that you do not accept. Original poetry is very welcome.

We do eschew articles and letters concerning electoral politics, but specific issues are fair game. Fainting Justin Bieber groupies are invited to participate ... but not with fatuous tales about Him. Ditto Elvis rapturists.

Send submissions to the Phactum Editor at phactpublicity@aol.com

Nathaniel Hawthorne (1804 - 1864),

born Nathaniel Hathorne, was an American novelist and short story writer. Haw-thorne's works were mainly fiction, often dark, brooding, and psy-



chological, dwelling on themes of good and evil, sin, and retribution. Hawthorne's great-great-great grandfather William Hathorne, a Puritan, was a New England political figure and a judge with a reputation for harsh sentencing. His son, John Hathorne, was the only judge involved in the infamous Salem Witch Trials of 1692/93 who did not subsequently repent his actions. Nathaniel added the "w" to his last name to mask his own pedigree.

THE AMAZING ADVENTURE OF SIX MEN ON A RAFT ACROSS THE PACIFIC! TRUE! THRILLING!

SOL LESSER

Editor: The article about, *inter alia*, the American Revolution (*Phactum* November/December 2012 p. 6) reminded me

of the singular fact that there are absolutely *no records* of any kind that have survived from colonial America for September 3rd through the 13th, inclusive, 1752. I smell a conspiracy!

Howard J. Wilk Philadelphia

Editors note: This is one "conspiracy" that might very correctly be blamed on the Pope. If it were to happen in our modern electronic age one would expect massive computer scares, and no doubt the End-of-the-World crowd would have a ball!

Editor: I just have to comment on Akim Adams' fantastic reviews of our meetings. His writing is interesting, yet not flowery, thoughtful and certainly critical. I know not of Mr. Adams' plans for the future but I think he should seriously consider, perhaps on the side if his future

plans don't have room, writing for a journal of some scientific or philosophic tenor. I believe that his critical ability and command of language merit him to be a serious consideration for a post of that sort. Good luck to Mr. Adams in all his endeavors.

Tom Medero Philadelphia

Editor: I'd like to add my two cents' worth on the issue of the demarcation problem (between real and pseudoscience). My favorite example of the hazy grey area is the Thor Hyerdahl experiment described in the book (and documentary) "Kon Tiki." Heyerdahl hypothesized (two words which fit together so nicely, don't you think?) that Polynesian islanders originated in the South American continent, and that they made their way to their islands on balsa rafts. In a remarkable adventure of experimental "proof of concept" sailing, Heyerdahl commissioned the felling of huge balsa logs, built from them a raft (using only techniques which would reasonably have been available to aboriginal colonists), plunged the thing into the mighty Pacific, and he and his team actually sailed to the Polynesian islands. Thus, they proved that it COULD HAVE BEEN SO. The book is fascinating, and probably still available in brick and mortar libraries (if you can find such a facility near you).

A more recent example of a similar project was just aired on NOVA (PBS) November 14, 2012; called "The Mystery of Easter Island," it was actually an experiment intended to test the plausibility of a "walking Moai" theory which proposes that the island's famous statues were moved to their current locations in a vertical position, consistent with the islanders' oral tradition that the Moai walked there. With a substantial amount of research and engineering, the team

produced a "replica" Moai of concrete, and using teams of volunteers to wrestle with nautical-grade ropes affixed to the

Moai's head, they managed to figure out a technique that caused the statue to wobble-walk forward a few inches per "stride." To NOVA's credit, the producers acknowledge that it can't be known that this method was actually used by the islanders in antiquity: all they claim to have proven is that it COULD HAVE BEEN SO.

I can't cite the source(s), but I understand that the Heyerdahl theory was disproven by a preponderance of opposing evidence; Polynesians came from Asia, not from South America. Those Polynesians might have moved Moai about by wagglewalking them, but at this point it seems a bit too far-fetched to accept as "proven." People with better expertise than mine will have to continue the pursuit of evidence and draw conclusions another time.

There lies my line of demarcation; when people having expertise in a field

can, over a period of time, arrive at a broad consensus of acceptance that multiple avenues of research converge to indicate the likelihood of a particular explanation's truth, then real science has been (provisionally) carried out, and we can work with the presumption that (until better information comes along) the question has been reliably answered. The pseudoscience comes in when only one nut (or one small group) insists that they have found some "Truth" in an unlikely event or theory, in the face of reasoned opposition from other experts in the same field of study. There's a grey area (no clear line of demarcation) which is best resolved by people who have taken the time to really learn the full scope and breadth of the field of study involved.

Paul Schlueter III Dallas, PA

Editor: Submitted for your approval: Twelve days. One life. Random coincidences? Or manifestations of Sheldrakian morphic resonances, karmic convergences, or

Jungian synchronicities? Or am I starring in my own *Truman Show* type of existence, or a cyberspace simulation or parody of reality created for the entertainment of sentient beings, or for the entertainment of a more advanced



simulated reality? (which in turn...) I may be paranoid, but some paranoid people really do have enemies.

On 17 November 2012, a Saturday, I was reading the Travel section of the Sunday *New York Times*. The page-1 lead article was about Prague, the capital of Bohemia, part of the Czech Republic, and the capital of the Republic as a whole. The article was illustrated with a photo of the Vltava River flowing through the city. I immediately took the sec-

tion to my computer and played a YouTube video of *Vltava* by Bedřich Smetana while I read the article. *Vltava*, also known as *Die Moldau*, is sort of the unofficial anthem of Bohemia. It's a very beautiful and moving piece of music.

Monday, 19 November: Today I was shopping at the Baederwood Shopping Center in Jenkintown. On the sign listing all the shops and such there was a listing for the Honorary Consulate General of the Czech Republic. That's odd, thought I; I would expect any Philadelphia-area consulate to be in Center City. This I must investigate.

One section of the shopping center was marked Offices. I walked into the lobby, which was lit only by badly flickering fluorescent lights. The elevators were out of order. No problem, as the consulate was listed as office 202. I walked up

the stairs to a closed fire door. Evidently people in the building were used to taking the elevator. I opened the door, which was unlocked, and walked down the hall to the Czech consulate, or so said the sign on the door. The door was closed, and locked. I knocked on the door several times but nobody answered it. Spooky.

I know exactly how this is going to play out: I'll return to the shopping center and there will be no listing for the Czech consulate on the outdoor sign. I'm going to walk in the office entrance, up the stairs, and down the hall to where the consulate was only to find it occupied by another business, the office workers of which will swear up and down that they've been there for years. Neither they

nor anyone else at the shopping center will have ever heard of a Czech consulate being there. I'll continue to insist I saw it there very recently and eventually I'll be taken away in a straitjacket.

23 November: I had occasion to return to the Baeder-wood Shopping Center today. "Honorary Consulate General of the Czech Republic" was still up on the shopping-center sign. I investigated no further because the sign by itself falsifies the "there is not now, nor is there any sign that there ever has been a Czech consulate there" theory. The consulate can also be found online.

Besides, I was afraid, because I have a new theory for the putative existence of a Czech consulate in Jenkintown: The "consulate" is actually a wormhole in spacetime to 16th-century Prague, specifically to the attic of the Old-New Synagogue, the home of the Golem. The Golem is a sort of Frankenstein's monster made out of clay from the banks of the Vltava River (see?). The now-decommissioned monster is said to be in the attic to this day. I was afraid I would walk through a doorway to that time and place, never to return. Or that my appearance at the threshold of the wormhole, a disturbance, if merely a ripple, in the natural order of reality, would cause a reanimated Golem to travel to our time and wreak havoc, carnage, mayhem, death, ruination, and de-

struction. (New-old joke: Where does an 800-pound Golem wreak havoc, carnage, mayhem, death, ruination, and destruction? Anywhere he wants!)

The Golem came to life when his creator wrote) אמת emet, "truth" in Hebrew) on his forehead. The monster behaved himself at first, but became increasingly violent and erratic. His creator turned him off by erasing the אנס make) אמת, "dead"). If only the Golem had continued to use his superpowers for goodness and niceness instead of turning to the dark side of badness and rottenness.

So the Golem is but one letter away from resurrection. I think it's somewhat likelier than not that the wormhole, as I have described it, does not exist. But if it does, the result of even approaching it could be catastrophic. I'm not willing to

take that chance.

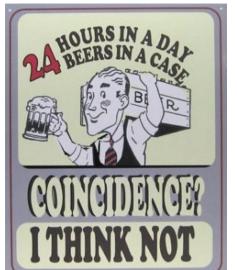
24 November: I was eating dinner in a restaurant tonight, and the music playing in the background was a cover of "Yesterday". I remembered that there is some question as to what the most-covered song in history is, "Yesterday" or "Summertime". The next song that played was..."Summertime". What are the chances of that? Actually, given that they are the no.1 and no. 2 (or no. 2 and no. 1) most-covered songs in history, a not-unknown fact, it's not at all surprising that at some time someone would hear one, think of the other, and then hear the other. But why does that someone always seem to be me?

27 November: Today I've been corresponding by email with some people con-

cerning the origin or origins of sayings such as "The harder I work, the luckier I get." Ben Franklin wrote "Diligence is the Mother of Good-Luck." Louis Pasteur said (in translation) "Chance favors only the prepared mind." My contribution to the discussion is to cite Alan MacDiarmid (Penn, Nobel Prize in Chemistry, 2000) as saying "I like the old Chinese proverb that says, 'I am a very lucky person, and the harder I work the luckier I seem to be." I doubt that it really is an old Chinese proverb, but I brought the attribution to the attention of, for example, Fred R. Shapiro, editor of the *Yale Book of Quotations*.

One quote in this genre is "Luck is the residue of design", which *Yale* attributes to Branch Rickey, 1946. Today in the *New York Times* online there is an obituary of Marvin Miller by Richard Goldstein. Miller was formerly the executive director of the Major League Baseball Players Association and a very important person in the history of baseball. The obituary quotes Everett M. Ehrlich, an economist and a former undersecretary of commerce, as quoting Branch Rickey on his blog in 2010 as stating, "Luck is the residue of opportunity and design." (I quote Goldstein who quotes Ehrlich who quotes Rickey. Got it?)

Before 26 November I had never come across Branch Rickey's "Luck is the residue of design"/"Luck is the residue



of opportunity and design". Now I've come across it in two completely independent circumstances.

28 November: Franklin, Massachusetts. Ever heard of it? Small town. My best friend, with whom I grew up in suburban Philadelphia, has lived there for a number of years. I almost never see him, and these days I speak to him on the phone only once or twice a year or so.

He called tonight, out of the blue. After we hung up, I checked the Powerball lottery site for the winning numbers—the jackpot was really big, over \$360 million cash. I won \$4! You've got to play to win. The site said there were jackpot winners in Arizona and Missouri. Sometimes philly.com has stories about the lottery that the lottery site doesn't have, like exactly where the winning tickets were sold, and more details about the winners. So I went to philly.com, and there saw an article about a bodybuilder nicknamed the "Egyptian Popeye", who has arms that measure 31 inches around. He lives in...Franklin, Massachusetts.

29 November: One other thing: After my phone call ended and before I checked the lottery site, I emailed my friend's father. This morning, I sat down to write this diary entry, but first I checked my inbox. There was an email from my friend's father, Ray, Ray.

Howard J. Wilk Philadelphia

Editor: I heard after the horrible school massacre in Newtown, Connecticut some radio DJ's saying, "what is wrong with people - animals would never do something like that". It got me thinking that yes, it is easy to focus on horrible brutality in the history of humanity - but it is by no means linked to our species. Foxes will often slaughter an entire hen house rather than just what they need. Cats routinely kill small creatures just for fun. When our adorable little dog whips his toys back and forth in a neck shake - it is just acting out a neck snapping action many predators instinctively do to smaller animals

Let me first reiterate that I am against slaughtering children and in no way make the following example to justify immoral acts. But, evolution has left many example of creature that slaughter not just competing species but the young of their own. In tribes of lions and even semi-feral cats - it is common for a new alpha male to kill all the suckling young he can find. A reason for this evolution backed behavior is that by killing all the nursing young in his own tribe, the females go into heat all the faster which gives him a much better chance to pass on genes through all the females - that is of course before some other male may challenge him for his position. And of course there are many examples of one tribe of wolves, hyenas, monkeys, etc. all slaughtering off competing tribes of their own species whenever possible.

As we have to rely more and more on non-religious based teaching of ethics, I am hoping the world can drop misleading myths like the nobleness of other species and be able to look honestly at evil - doing so requires us to come to grips with the truth - that violence is inherit in our genes. Of

course we also should understand that cooperation and altruism is also innately in there. Acknowledging the evolutionary force to be violent in no way is justification of immoral actions - to me it is just more justification of the need for ethical training.

Eric Krieg Maple Glen, PA

Editor: For those diehard skeptics who still refuse to admit the existence of veritable merfolk, I submit the below article by none other than the eminent Benjamin Franklin entitled A Sea Monster which appeared in The Pennsylvania Gazette on April 29, 1736 (http://www.historycarper.com/1736/04/29/a-sea-monster/):

From Bermuda, they write, that a Sea Monster has

been lately seen there, the upper part of whose Body was in the Shape and about the Bigness of a Boy of 12 Years old, with long black Hair; the lower Part resembled a Fish. He was first seen on shore, and taking to the Water, was pursu'd by People in a Boat, who



intended to strike him with a Fishgig; but approaching him, the human Likeness surpris'd them into Compassion, and they had not the Power to do it.

Don Nigroni Glenolden, PA

Ω Ω Ω



Various Ruminations

Collected/Written by Ray Haupt (with help from others)

PhACT and Politics of Science

PhACT's speaker for November 2012, Kenneth Silber, is a journalist and blogger who describes himself as a RINO (Republican in Name Only). At the meeting Mr. Silber discussed politics and science and how the two major parties differ in their biases and are distrustful of scientists in differing degrees depending on the matter under consideration. For example, Republicans tend to be more skeptical in matters of climate change and Democrats more skeptical about vaccines. There are exceptions on each side, of course.

Mr. Silber has a blog where readers may comment:

http://quicksilber.blogspot.com

Paranormal Police

It seems that interest in ghosts and other paranormal activity is popular among various members of the Philadelphia Police Department. By day they are police officers chasing bad guys, by night they are ghost hunters. The linked article suggests that there are more than 300 paranormal investigative groups in Pennsylvania alone according to the Paranormal Societies website which may be found at:

http://www.paranormalsocieties.com/

The article may be found at the Philadelphia Inquirer website: http://www.philly.com/philly/news/20121113_City_cops_turn_out_to_be_boys_in_boo.html

Antiquackery Book Published

Dr. Stephen Barrett reports in Consumer Health digest, November 22, 2012:

Morton E. Tavell, M.D., Clinical Professor of Medicine at the Indiana University School of Medicine, has produced an excellent book intended to help people sort health-related facts from fictions. The book's first section discusses in great detail how facts are determined. The second section covers fallacies and misconceptions related to specific claims. The third compare scientific and religious thought. Copies of Snake Oil Is Alive and Well: The Clash between Myths and Reality are available for \$13.95 for the hard cover and \$5.99 for the Kindle edition from

http://www.amazon.com/Snake-Oil-Alive-Well-Reality-Reflections/dp/1936587882

Creationists in Trademark Suit

Glenn Branch, Deputy Director of NCSE (National Center for Science Education), in the NCSE weekly newsletter of November 23, 2012 reported this story of the ever more creative tactics of Divine Creation enthusiasts.

The producers of the NPR show Science Friday filed a

suit against the operators of a right-wing radio show that features a creationist segment, Real Science Friday, according to the New York Post (November15, 2012). In documents filed with the Supreme Court of New York on November 9, 2012, ScienceFriday Inc. accused Bob Enyart -- who describes himself as "America's most popular self-proclaimed right-wing religious fanatic homophobic anti-choice talk show host" -- as well as his company Bob Enyart Inc. and his cohost Fred Williams of trademark infringement and cybersquatting.

In particular, ScienceFriday complained, "Defendants have adopted the name 'Real Science Friday' and are making a number of infringing uses of it in commerce," citing various uses on their websites, audio programs, and videos, and concluded, "it is Defendants['] desire to continue to encroach on the Plaintiff's trademarks to steal Plaintiff's decades of goodwill." Indeed, the Post's story observed that Enyart's website for Real Science Friday contains the joking line "Don't Be Fooled by NPR's parody titled Science Friday;) Welcome to the REAL Science Friday."

On Real Science Friday, according to its website, the show's hosts "talk about science to debunk evolution and to show the evidence for the creator God including from biology, geology, astronomy, and physics. (For example, mutations will give you bad legs long before you'd get good wings.) Not only do we get to debate Darwinists and atheists, and easily take the potshots from popular evolutionists like PZ Myers and Eugenie Scott, but we also occasionally interview the outstanding scientists who dare to challenge today's accepted creed that nothing created everything."

In contrast, NPR's Science Friday provides accurate information about science, including evolution, and -- with its April 10, 2009, interview with NCSE's executive director Eugenie C. Scott about the treatment of evolution in the latest revision of Texas's state science standards -- about social controversies over the teaching of evolution. ScienceFriday is asking the court for a permanent injunction prohibiting the defendants from using "Science Friday" and "Real Science Friday" and similar names, logos, and URLs, as well as for legal fees and statutory and punitive damages.

For the story in the New York Post, visit:

http://www.nypost.com/p/news/local/manhattan/science_radio_showdown_i2J7ECpnKzBVHElg0jrYuI

For court documents from the case, visit:

http://iapps.courts.state.ny.us/iscroll/SQLData.jsp? IndexNo=653879-2012

For Scott's April 10, 2009, appearance on Science Friday, visit:

http://www.sciencefriday.com/segment/04/10/2009/texas-schools-and-evolution.html

The above material from NCSE is certainly interesting

and illustrates the lengths that zealots will go to press their points, but I find it a bit dissatisfying in that Glenn talks about Real Science Friday and its website but does not provide a link to that website. Thinking people such as those who subscribe to the NCSE and PhACT newsletters can handle the twisted logic of Creationists. So here it is:

http://kgov.com/real-science-radio

It seems that Real Science Friday has been renamed Real Science Radio. It could be fun to prowl that site with an open mind and good sense of humor. The home page has this little gem as an example of an evolutionist argument sneeringly debunked by the shows commentators: "... mutations will give you bad legs long before you'd get good wings."

Several years ago PhACT speaker, Dr, Ted Daeschler, a paleontologist at Philadelphia's Academy of Natural Science, indirectly broached that concept of weak legs in a most fascinating discussion of his adventurous discovery of *Tiktaalik roseae*, a Devonian era (375 million years ago) creature. Tiktaalik may well be described as a missing link between fish and creatures that was among the very first creatures to have legs, rather weak ones.

It so happens that Dr. Daeschler's colleague and codiscoverer of Tiktaalik, Dr. Neil Shubin, will be discussing evolutionary matters at the Free Library of Philadelphia, on February 13, 2013. See the listing in the Calendar in this edition of Phactum and see the description of Dr. Shubin's new book at the bottom of this page.

The NCSE website is: http://ncse.com -- where you can always find the latest news on evolution and climate education and threats to them. To subscribe to NCSE's free weekly e-newsletter:

http://groups.google.com/group/ncse-news

Philadelphia Science Festival 2013

PhACT will participate in the Philadelphia Science Festival 2013 by teaming up with the Franklin Institute to host the Amazing James Randi as our speaker. The event will be on April 20th at the Franklin Institute Museum at 20th and the Parkway in Philadelphia. More details will be forthcoming in upcoming Phactum.

Philadelphia emerges as East Coast gambling hub

USA Today, January 5, 2013, reports that Pennsylvania has recently emerged as the second largest gambling state trailing only Nevada by a large margin.

"David Schwartz, director of the Center for Gaming Research at the University of Nevada at Las Vegas, says 11 licensed casino operators in Pennsylvania cleared \$3.5 billion in gambling revenue in 2011—a figure second only to establishments in Nevada, which cleared \$10.7 billion."

The largest concentration of casino operations is in the Philadelphia region although there is only a single casino, Sugarhouse, that is physically in Philadelphia County. Another casino license in the City is being considered and likely will be a \$500 - \$700 million dollar operation near the sports complex in South Philadelphia.

One commentator while discussing market saturation cynically observes "The demand is there. If a casino operator builds it, (gamblers) will come."

The article does not mention consequences such as escalating gambling addiction in Pennsylvania.

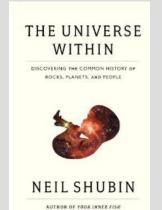
http://www.usatoday.com/story/travel/destinations/2013/01/04/philadelphia-east-coast-gambling-hub/1809935/

The Universe Within:

Discovering the Common History of Rocks, Planets, and People

By Neil Shubin

Hardcover: 240 pages Publisher: Pantheon (January 8, 2013) ISBN-10: 0307378438 ISBN-13: 978-0307378439



From one of our finest and most popular science writers, and the best-selling author of Your Inner Fish, comes the answer to a scientific mystery as big as the world itself: How are the events that formed our solar system billions of years ago embedded inside each of us?

In Your Inner Fish, Neil Shubin delved into the amazing connections between human bodies—our hands, heads, and jaws—and the structures in fish and worms that lived hundreds of millions of years ago. In The Universe Within, with his trademark clarity and exuberance, Shubin takes an even more expansive approach to the question of why we look the way we do. Starting once again with fossils, he turns his gaze skyward, showing us how the entirety of the universe's fourteen-billion-year history can be seen in our bodies. As he moves from our very molecular composition (a result of stellar events at the origin of our solar system) through the workings of our eyes, Shubin makes clear how the evolution of the cosmos has profoundly marked our own bodies.

How to Become a Professional Charlatan

In our uncertain financial times the Professional Charlatan business might have a certain appeal to some folks. Edzard Ernst, MD, PhD, FMedSci, FSB, FRCP, FRCPE, Emeritus Professor, Exeter University, facetiously suggests the Charlatan line of work in his internet blog which may be found at: http://edzardernst.com/2012/12/how-to-become-a-charlatan/

Dr. Ernst identifies a simple nine step approach to setting up business as a Charlatan which should be rather fool proof once that first step has been carefully conceived.

- 1. Find an attractive therapy and give it a fantastic name
- 2. Invent a fascinating history
- 3. Add a dash of pseudo-science
- 4. Do not forget a dose of ancient wisdom
- 5. Claim to have a panacea
- 6. Deal with the 'evidence-problem' and the nasty sceptics
- 7. Demonstrate that you master the fine art of cheating with statistics
- 8. Score points with Big Pharma
- 9. \$\$\$ Ask for money, much money \$\$\$

Dr. Ernst's waggish plan is clearly intended to give pointers to establish business as a medical Charlatan, but with little modification the principle applies to Free Energy, Doomsday Prophesy, Multi-Level-Marketing, Spiritual Communications, and many other schemes of dubious worth. In all realms of Charlatan endeavour it is handy to have the per-



Hieronymous Bosch paints a scene of a Renaissance mountebank fleecing incredulous gamblers.

sonal trait of voluble malevolence, i.e., be a charming cad.

We do not suggest pursuing the nine point plan but it is fun to fantasize and perhaps some imaginative Phactum reader will solve Step 1 in a unique way and submit that idea to Phactum. It could be fun, especially if Step 1 is directed toward scamming the scamsters.

Meanwhile, it might be interesting to view Dr. Ernst's blog "The Charlatans Wish List for 2013": http://edzardernst.com/2012/12/the-charlatans-wish-list-for-2013/

Major Progress in Cancer Treatment

We have reported in Previous Phactum about successful clinical trials in the treatment of Chronic Lymphocytic Leukemia (CLL) at University of Pennsylvania's Abramson Cancer Center. See Phactum March 2011 p. 12, January 2012 p.9, and May 2012 p.6

There is more good news with this technology, this time at Children's Hospital of Philadelphia located across the street from the Abramson Center. In this case a 7 year old Pennsylvania girl, Emily, afflicted with Acute Lymphoblastic Leukemia (ALL), had exhausted all conventional treatment options. Bone marrow transplant was considered impossible. Doctors suggested participation in a clinical trial that involved modification of HIV virus to form "killer" T-cells

This therapy commenced in April of 2012 and in June Emily went home with no apparent leukemic cells in her body. After six months Emily appears cancer free although doctors are reluctant to declare a cure for several more years.

This technology has been reported in many technical journals but the article in the Daily Mail is very readable. http://www.dailymail.co.uk/health/article-2246312/Girl-7-beats-leukaemia-revolutionary-treatment-using-HIV-virus-wire-immune-system.html

The Canadian Association of Witch Doctors Putting the magic back into healthcare

It is refreshing that the witchdoctors of Canada have organized and embraced modern technology in communica-

tions while maintaining the ancient traditions or their craft. The Canadian Association of Witch Doctors (CAWD) has a website that fully explains their philosophy and therapeutic results. http://witchdoctor.ca/

On the Home Page they state: "Witch doctors (WDs) treat all forms of health concerns, from acute to chronic, geriatric to pediatric, magical systems to quantum phenomena, from the physical to the metaphysical, even to the ultimate



health challenge; raising the dead. It is the approach, philosophy and rigorous training of witch doctors that sets us apart from other health care practitioners. Unlike our fellow complementary and alternative medicine (CAM) practitioners who claim that their therapeutic interventions might, or actually do work, we make no such claims. In fact, we claim to be the only fully honest healthcare profession in that we openly assert that none of our therapies actually work."

They go on to say "As a part of our code of conduct unlike many other CAM professionals Canadian witch doctors do not charge for their services, as a) there is no need because of the WDs awesome powers of manipulating loco and good fortune, and b) as we acknowledge none of our practices actually work."

This is a very compelling health care system indeed and even has an official theme song sung by a powerful witch doctor who has the power to make rodents sing.

http://www.youtube.com/watch?v=cmjrTcYMqBM

Rebuttal to Akim Adams' October 2012 meeting report on Dr. Michael Gordin's discussion of "The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe"

By Tom Medero

I read with great interest Akim Adams' accurate and interesting reporting on Dr. Michael Gordin's engaging presentation and argument in defense of his book "The Pseudoscience Wars: Immanuel Velikovsky and the Birth of the Modern Fringe". Mr. Adams' review of the meeting was accurate and concise and as reporting should be, simply told with accuracy what had occurred. Where opinion and/or argument presented itself in Mr. Adam's review I had found myself in some contention.

I can reasonably agree that there need not be a clear, sharp, 'pin-line" of demarcation separating science from pseudoscience. And pseudoscience will always exploit this gray area as an admission ticket to affirmation, for it doesn't have much else going for it after rigorous examination. It's cause celebre, of course, is that it looks like real science out of necessity for without that facade, no-one would bother giving it a second look. So make-up and appearance are partly to blame for fooling the critical thinkers about science, not the pseudoscience itself. If someone says to you "I'm a Cop" and you let him take your car for a "police emergency" who is really to blame? The police imposter, or the car owner?

More importantly, and speaking directly to Dr Gordin's point, I don't believe that Karl Popper or his philosophical qualifications for determining good science from bad or pseudoscience should be examined or considered in a vacuum. I contend, and will continue to argue, that as with all philosophy, his propositions are a stepping stone built on the work of previous philosophical views - of T. C. Chamberlain, Rudolf Carnap, and the all-too-forgotten philosophic contributions of Galileo, Sir Isaac Newton, and Aristotle. When Popper is viewed from this built-upon perspective, the philosophic underpinnings of real as opposed to pseudoscience are just too insurmountable to be overcome by nitpicking the one point (demarcation) as the Achilles heel of the whole of Philosophy of Science. Truly, no philosopher worth his or her salt would accept complete refutation of a theory based on one point. And neither will I.

Surely the metaphor will continue to be drawn with the pseudoscientist playing the role of Galileo as martyr with the 1616 conviction by the Church-of-Rome led Suspicion of Heresy playing the role of legitimate science. It is here where I have another problem; this time with theoretical physicists, particularly Lee Smolin of the Perimeter Institute for Theoretical Physics and his Cosmological "theory" of Natural Selection where biology supersedes physics, and Leonard Susskind of Stanford University as the primary author and salesperson for "String Theory".

Now, I would never accuse physicists of such high credentials to be pseudoscientists. I will be the first to admit that I have neither the knowledge, credentials, or expertise to sufficiently challenge their theories or views. Remember, it was Socrates who replied to the charge of knowing more than anyone else with the statement that if he knows anything at all, it is that he knows how much he doesn't know. An apropos and humble admission of ignorance. But I do have the capacity for reason, which was enough for Socrates and Plato and admits me to critically examine any theory or hypothesis that may come my way, particularly if it concerns areas where I'd like to think that I lay claim to some small degree of expertise, namely Philosophy of Religion, Philosophy of Mind, and the relevant subject here, the Philosophy of Science. But some of the theories of physics, namely the "Fecund Theory of Universes", where Dr. Smolin "theorizes" that the cosmos "gives birth" to other cosmoses, with the best suited for survival according to our known laws of physics existing on where the others fail. For how long, he does not say, but qualifies the surviving universes as those that have superior survival mechanisms. What that may mean, assuming the laws of physics are universal and equally applicable to any and all universes, is quite unclear to me. I'm not kidding, as Yogi Berra famously said "You could look it up." As thought about together with Dr. Leonard Susskind, the foremost defender of string theory (as mentioned in Mr. Adams' review) I have to ask - when does something move from becoming a phantasmagorical idea, dream, or fantasy-thought to becoming an accepted, legitimate "theory" of science? Does a person of superior credentials have to contend with the establishment for a number of years until they finally give way? Or is there some truly revelatory findings that concretely support such "theories"? What, exactly, is the protocol or mechanism that moves something from being a fantastic idea to becoming a legitimate scientific theory? What are the necessary steps that need to be taken to have an idea regarded as a legitimate theory? Scientific politics aside, I know what a theory is supposed to do: "In science, the term "theory" refers to "a wellsubstantiated explanation of some aspect of the natural world, based on a body of facts that have been repeatedly confirmed through observation and experiment." That, believe it or not, is from Wikipedia and, applying Occam's razor, it could not have been explained more succinctly. What I am getting at here is that we are discussing two well-known and unchallenged by the faint of heart physical theories, proposed by leaders in their respective fields, and I am asking is that enough to legitimately consider them as legitimate scientific theories. They clearly cannot be testable, falsifiable, or even quantifiable. So why are they not thought of as pseudoscience, as Velikovsky's Worlds in Collision was? In his defense, was he just attempting to resolve and reason his way through the catastrophes of the Old Testament? He was trained as a psychoanalyst, so science of quality was certainly not a stranger to him. As Dr. Gordin stated "No one claims to be a pseudoscientist." They believe their theories; and although that belief may be tainted with confirmation bias it remains a sincere belief nonetheless. Even Einstein had to wait years for a solar eclipse to prove his theory of relativity by photographing light rays bending around the sun. Should we not demand at least the same effort from Messrs Smolin and Susskind toward confirmation of their theories?

So why are such, in my opinion, fantastic, almost beyond reason in their tone, physical theories not more doggedly challenged given the strength of the philosophical foundation given us? Is it the resolute fear of exile from the legitimate physics community? Excommunication from the ivory towers of academia? So where is these theories' philosophic grounding as "good" science? There are no method(s) of multiple working hypotheses that T.C. Chamberlain proposed in the mid-19th century, no concurrence with Carnap's views: "Theoretical laws are, of course, more general than empirical laws. It is important to understand, however, that theoretical laws cannot be arrived at simply by taking the empirical laws, then generalizing a few steps further. How

does a physicist arrive at an empirical law? He observes certain events in nature. He notices a certain regularity. He describes this regularity by making an inductive generalization. It might be supposed that he could now put together a group of empirical laws, observe some sort of pattern, make a wider inductive generalization, and arrive at a theoretical law. Such is not the case." (Rudolph Carnap, Philosophical Foundations of Physics, Ch. 23, Observables and Non-observables, 1966)

Einstein pursued his theory all the way through to empirical observation. Whether his motive was vindication of his work, or zealousness in seeking the truth, we can only guess and it really matters not. The point is he did it. Theoretical physicists of today perhaps through laziness or arrogance, don't seem to appear as zealous as a young Einstein who had to "sell" his theory to an astronomer of considerable talent, with the right equipment, and then get him to traipse around the globe chasing a full solar eclipse. I just don't see that kind of personal effort being put out today; sure we have big toys like the large Hadron Collider at CERN, and the Hubble Space Telescope, but these machinations don't require the same personal investment made by Einstein. I believe this lack of effort on the part of the theoreticians everywhere probably lets in more pseudoscience than Popper's philosophy of demarcation ever did. It is one thing to come up with a great idea; it is another thing altogether to adhere to a set of strict scientific principles and show your theory to be the best explanation there is.

Editor's notes:

- ♣ See Akim Adams' meeting report (Phactum November/ December 2012, page 9): http://www.phact.org/data/phactums/Phactum%202012-11.pdf
- ♣ See Letters to the Editor by Don Nigroni, Howard Wilks, and Paul Schlueter relating to this topic.

Tom Medero is originally from Long Island, NY, and has lived in Philadelphia for 20 years now. Tom graduated this past Spring from Community College of Philadelphia and is currently studying to complete his B.A. at Temple University majoring in Psychology.

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"Logic is not concerned with human behavior in the same sense that physiology, psychology, and social sciences are concerned with it. These sciences formulate laws or universal statements which have as their subject matter human activities as processes in time. Logic, on the contrary, is concerned with relations between factual sentences (or thoughts). If logic ever discusses the truth of factual sentences it does so only conditionally, somewhat as follows: if such-and-such a sentence is true, then such-and-such another sentence is true. Logic itself does not decide whether the first sentence is true, but surrenders that question to one or the other of the empirical sciences."



Spring 2013 Adult Education Courses

Adult education courses at the Wagner Free Institute of Science are free and open to the public. Courses are taught at the college undergraduate level. For more information: Telephone: 215-763-6529

Email: info@wagnerfreeinstitute.org Website: http://www.wagnerfreeinstitute.org

How Plants Work: Topics in Practical Plant Physiology for Gardeners, Professor Karen Snetselaar. 1 Tuesday and 5 Mondays, January 22 - February 25, 2013, 6:30 - 7:30 PM. Pennsylvania Horticultural Society, 100 N. 20th Street (20th and Arch Streets). This course will examine how plant structure and growth is influenced by water, minerals, and other chemical compounds and provide you with a better understanding of how to meet their needs.

This course requires preregistration. Preregistration begins Monday, November 26, 2012.

Genetics: From Mendel to Watson & Crick and Beyond, Professor Mary Beth Davis.

6 Wednesdays, January 23 - February 27, 2013, 6:30 - 7:45 PM. Independence Branch of the Free Library, 18 S. 7th Street (between Market and Chestnut). This course is an informal "introduction to genetics" with a focus on learning what genes are and how they function. Practical applications of genetic technology will also be discussed. No preregistration required.

Vertebrate Anatomy, Professor Jason Downs.

8 Saturdays, January 26 - March 16, 2013, 10:30 AM - Noon. University of Pennsylvania Museum of Archaeology and Anthropology, 33rd and Spruce Streets. This course will examine the vertebrate body and show how biological form reflects function, ontogeny (growth and development), and phylogeny (evolutionary relationships).

This course requires preregistration. Preregistration begins Monday, November 26, 2012.

Avant-garde Science, Avant-garde Art: The Artistic Response to the Scientific Revolutions of the 19th Century, Professors Michael J. Lewis and David Hewitt.

6 Tuesdays, January 29 - March 5, 2013, 6:30 - 8:00 PM. Pennsylvania Academy of the Fine Arts, 118-128 N. Broad Street (between Arch and Race Streets). This course, a discourse between an art historian and a biologist, will look at the way in which 19th century artists and architects responded to the insights of the natural sciences.

This course requires preregistration. Preregistration begins Monday, November 26, 2012.

Reading the Landscape of Philadelphia, Professor David Hewitt.

6 Mondays, March 25 - April 29, 2013, 6:30 - 7:30 PM. Pennsylvania Horticultural Society, 100 N. 20th Street (20th and Arch Streets). Through a series of illustrated case studies, this course will provide reconstructions of a variety of historic landscapes throughout Philadelphia. Implications for urban greening will also be discussed.

This course requires preregistration. Preregistration begins Monday, November 26, 2012.

MEMBERS ONLY WORKSHOP: Beetle Basics with Professor Robert T. Allen.

8 Thursdays, March 7 - April 25, 2013, 6:30 - 8:00 PM. The Academy of Natural Sciences of Drexel University, 19th Street and the Benjamin Franklin Parkway, Philadelphia. An introduction to the most diverse and prolific group of multicellular organisms on our planet -- Beetles, the Insect Order Coleoptera.

This special hands-on workshop is limited to 10 students. To enroll, you must be a member of the Wagner. In addition, there is a \$25 registration fee. Preregistration begins Monday, January 7, 2013.

Please call 215-763-6529 x13 if you have any questions about this special workshop or membership.

WHAT'S ON YOUR MIND?



In Order to Form A More Perfect Union

By Tom Medero

I want to take a turn in my usual subject matter and discuss the reality and relativism of normative ethics. Normative, in this sense, refers to what *should be* the case. I have noticed that American culture since the mid 1950s has

taken a dramatic turn in ethical tolerance; "Father Knows Best" is no more seen as even plausible and sometime comical, and Ellen has been welcomed out of the closet. We might subscribe some of this to the progressiveness of the socalled counter-culture of the 60s, and the children of those socially and intellectually liberated parents that are our young adults today. That societal sea change has molded their choices, opinions, viewpoints as far as what goes, and what doesn't. That in sum is what I have personally witnessed in my lifetime. The resultant modification in this culture. at least to some degree, is an increase in our level of permissiveness. And that, I aver, is the result of a necessary progressive response to the ultraconservative 50s. Freedom

can be a double-edged sword. New freedoms come with new responsibilities. I have no intent to disparage the "greatest generation" that proceeded the flower children; they endured two world wars, a relentless world-wide economic depression, and order and responsibility were on the duty roster continually just to survive. Even after the cultural catharsis that was the 1960s heinous acts and crimes against

persons and property are still rightly considered vile and adjudicated appropriately most of the time. But the level of heinousness, if there could be different degrees of such a thing, have seemed to have lessened in the last 50 years with

a greater degree of tolerance or, in harsher terms, an increased level of excuse-making.

This, to be sure, is not a complaint. Everyone longs for more freedom even if it sometimes infringes slightly upon another's autonomy. Be honest, you want yours, too. As a culture, we are guided only by our own personal moral choices and they don't always agree with others' choices and judgments. That's what makes us individuals. But for perpetuation of human civilization (whatever that is), culture being a more apropos description, some form of understood rules

Going back, some of us know that in the United States, the land of freedom, women were not permitted to vote until the ratification of the 19th

must apply.

Amendment in 1920 granting women the right to vote, but still implicitly withheld representative rights to serve constituents in Congress. Persons of African heritage were not considered full persons under the Constitution as crafted at the Philadelphia Convention of 1787, 3/5ths being the compromise between delegates who wanted slaves counted for electoral college and tax revenue purposes but without

The Nineteenth Amendment of the United States Constitution



The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

The 19th Amendment became law on August 18, 1920 when Tennessee became the 36th state to ratify the amendment, thus making it the law throughout the United States.

the right to vote, and delegates opposed to slavery that wanted only free persons counted. Thankfully, the 13th and 14th Amendments began the process of corrections of these legal fictions, but as an ethical and moral process it was based on congressional representation apportionment not right or wrong, and even this was not fully realized until much later. These amendments still hedged full citizenship rights for the disenfranchised, a word that just bursts with implied injustice. These examples are just two of the horrors of the civilized society we deem ourselves to be, better educated, more urbane, wealthier and more sophisticated than those in the rest of the world. How pompous! And that's ethical relativism. Is there an answer for humanity? For us? If we choose to lead, we'd better be worthy of the task.

So the question at hand seems to be who or what is the best course to avail fairness in equal opportunity for all of humanity. Regardless of our locale, we are all human and consistency must apply. There is no room for relativistic mores. Let's start with the basics, from an American perspective. Are we in a position of authority to judge female circumcision in certain Islamic cultures no matter how repulsive it is to us? Or arranged marriages as common among Eastern cultures? Is this more ethically "wrong" than "forced marriages" where neither party wills to marry? By the way, the United Nations does view forced marriage as a human rights abuse but not arranged marriages. What seems to be needed, regardless of cultural preference and tradition and based on rationality and reason alone, is a comprehensive set of normative ethics that can usefully serve all of humanity in equal terms and with congruence. In my philosophic enquiries into this, I have found one idea that stands head and shoulders above the rest. Relativism is excusive, and cultural propriety insults the intelligence of reason. I believe I found the answer in a 17th century philosopher from Prussian Koenigsberg (now Kaliningrad, Russia) named Immanuel Kant. Of all the brilliance he displayed in various areas of philosophy, his "Categorical Imperative" as a foundation as well as an answer to the moral and ethical concerns of his day still stand as an eminently reasonable answer to a very difficult problem; how to have all of humanity ascribe to the same moral code of conduct so that we may all live in harmony. Organized religions have tried, with limited success, to achieve this as well. But, when one professes to be the "right" or only "correct" religion are we not simply seeing relativism in disguise? Kant, I believe, did not fall short. Some may see my views as a utopian dream, but if it were not for hopes and dreams, where would our goals originate from? So in the spirit of the season, which should be a year-round season rather than limited only to a marketer's efficacy, here is my hope for humanity.

The crux of Kant's argument, called the "categorical imperative", is that it demands an absolute, unconditional requirement that asserts its authority in all circumstances, both required and justified as an end in itself. Stated verbatim, "Act only according to that maxim whereby you can, at the same time, will that it should become a universal

law." (Immanuel Kant, Groundwork for the Metaphysics of Morals, 1785) It is best known in its first formulation: act only according to that maxim whereby you can, at the same time, will that it should become a universal law. It does not ask that we act out of a sense of duty, or respect for the law, but out of a genuine good will that has no contingencies.

A universal law. Think about that for a moment. Universal laws apply in all places in all times - no exceptions and that can be a tough pill to swallow. How many of us obey most laws let alone universal laws? Ever run a stop sign? Paid a bill late and said you sent it in? Sometimes we think a little too highly of ourselves. Universal laws of nature such as gravity we have no control over; we are utterly subservient to it like it or not. Universal laws of ethics don't carry the same weight; they can be compromised by selfish want, be usurped by greed, lust, covetousness, and can have control exercised over them by the self serving and overly ambitious. If imposed, it would surely be met with strenuous but fallacious arguments by those who stand to lose their temporal gain to the prospect of equality. But I cannot forsake hope; this could work, but only with the assent and complete co-operation of all human culture. The fly in the ointment here is free will, and that is a situation philosophy has been dealing with from the beginning. To be sure, Kant has not come up with a solution to that problem, but that's what keeps philosophy alive. Philosophy attempts to answer questions to which other disciplines have none. Most of us behave every day in terms of what are called hypothetical imperatives, meaning that our means justify the ends such as if I want to become more learned, I go to school, if I'm in a rush to get home, I'll put others in jeopardy driving too fast. To each his own. Often our own selfishness or simple lack of thought calls our conscience to ignore what reason tells us should be categorically imperative. And this is what I see as our "original sin", the inability to overcome ourselves to the betterment of all.

Kant had his own contentions with the moral and ethical problems of his day. But I sense that were it not for the passing of years and a change in context, the problems would still be fundamentally be the same. Spouses are still cheating on each other, thieves still steal. What was bad behavior five thousand years ago, is still bad behavior today. True morality is absolute and unchangeable, it is not relative to conditions or times. I believe this idea still rings true. Perhaps not easily attainable, but the true shame of humanity is that we are not willing to put a serious effort to it. Granted, it is an ideal. A vision. But in the dark of night, completely alone with ourselves, truth can sometimes become brutal. I, for one, cannot honestly admit that what we are corporeally attached to is really worth keeping should it slow us in the slightest in order to attain a more perfect union. I wish you all Peace and Love. And this idiom, so common from my teenage years, seems now out of fashion and sorrowfully dead well before its time. Let's fix it.

"The Power of Positive Writing" by Paul Schlueter III

As long as I can remember, there have always been certain people who made a Philosophy of Life out of their belief in the power of positive thinking. Just be optimistic, they would say, and things will turn out well. It can become a mantra. Always look for the bright side; Always see the best in others; Expect good things, and they will happen; etc. Well, a new study reveals that, at least where human minds are involved in decision-making, there might be something to it.

Janet Raloff, Senior editor at Science News, again brings

us an intriguing story. In the October 10, 2009 issue, she reports that TRAINED peer reviewers for two orthopedic journals (not identified) were swayed by positive outcomes in a study. The University of Washington Medical Center, in Seattle, sponsored a study led by Seth Leopold, which was presented September 11, 2009, before the International Congress on Peer Review and Biomedical Publication. Leopold evaluates his team's findings with the quote, "Novel treatments will appear more effective than they actually are."

Here's why this is important to critical thinkers. When researchers

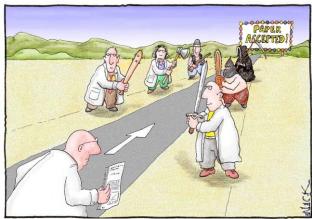
complete a study, they submit a written report to a peerreviewed journal, seeking publication. Reviewers, based on their training and experience, are supposed to evaluate the study's methodology, its objectivity, and other factors of the authors' use of good scientific principles in the course of their work. Peer reviewers (a publication may consult several for each article submitted) will then advise the editors if the research stands up to their scrutiny, and reviewer opinion can have a bearing on whether or not the article is published. It's this make-or-break point that concerns us. If reviewers are, despite their training in scientific objectivity, biased in favor of studies with a positive outcome, then just writing "we helped the patients that we studied" means the research is more likely to be published than its merits deserve. In a world where Complementary Alternative Medicine (CAM) and pseudoscience are shoving their way onto the medical scene, to exploit the unfortunate ignorance of suffering

patients for unearned profit, it is particularly worrisome that borderline, or even substandard, research might be getting published, just because the authors claim positive outcomes!

According to Raloff's report, the survey team prepared bogus articles, which were identical except for the following difference in outcomes: "Data in the first showed better prevention of infection by one of two antibiotic regimens. In the second version, neither treatment outperformed the other but the results still would have affected patient care." As we can see, the first paper was "positive" in regard to patient outcome for one regimen, and in

the second, it was merely inconclusive (no "negative" outcome appears to have been included in this trial.)

Of 55 reviewers who read the first paper for one journal, 98% recommended that it be published. Of another 55 reviewers who read the second paper, only 71% recommended publication in the same journal. The second journal's reviewers turned in results which were



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

Cartoon by Nick D. Kim, http://www.lab-initio.com Used by permission.

The time to begin writing an article is when you have finished it to your satisfaction. By that time you begin to clearly and logically perceive what it is you really want to say.

~Mark Twain

characterized as "similar, though not statistically significant."

Of less importance than the make-or-break point, but still interesting from a critical thinker's perspective, reviewers at both journals were more likely to give the first paper's "Methodology" section higher ratings than an identical section in the second (neutral) paper. Leopold also states that deliberately-included mistakes (identical in both papers) were less likely to be noticed by reviewers of the positive-outcome version.

Granted, Phactum readers may not have a great deal of influence over how biomedical journals carry out peer reviewer training and evaluation, so it's probably not within our power to correct whatever is going wrong (one would certainly hope that these serious, dedicated scientists will take steps to address this, on their own.) However, it may benefit us to be aware of this bias (let's call it a Positivity Bias) whenever we have to make decisions for our own lives or businesses. It may be possible for us to ask an associate to temporarily remove information regarding the outcome from articles, proposals, and reports we need to read, so that we can focus on methodology and accuracy. If we don't KNOW the outcome, it would seem to be much less likely that we

might be subconsciously swayed by whether it is positive, neutral, or even negative. Once we have made a preparatory determination on the reliability factors of the information we're reviewing, then hopefully we can be more confident in trusting the knowledge that the outcome has to offer.

It seems like a lot of extra work, doesn't it? Still, isn't that one of the recognized costs of critical thinking? If we want the easy answers, we can just listen to whatever the first hokum practitioner tells us, and Believe without the need for additional thinking.

Editor's note: For another view of peer review see Rationally Speaking is a blog maintained by Prof. Massimo Pigliucci, a philosopher at the City University of New York. http://rationallyspeaking.blogspot.com/2012/01/radical-reform-for-peer-review.html

Paul Schlueter III is serving Life in Prison in NE Pennsylvania. His supporters have created a website about him, www.jaylbird.org

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Invisible Ink: Spycraft of the American Revolution

by John A. Nagy

Publisher: Westholme Publishing December 2009 Hardcover 384pp ISBN-13: 9781594160974 ISBN: 159416097X



During the American Revolution, espionage was critical to the successes and failures of both Continental and British efforts, and those employed in cloak and dagger operations always risked death. While the most notorious episode of spying during the war—the Benedict Arnold affair—was a failure, most intelligence operations succeeded. Spycraft was no more wholly embraced than by the American commander-in-chief, George Washington. Washington relied on a vast spy network and personally designed sophisticated battle plan deceptions and counterintelligence efforts, some surprisingly modern in form. In *Invisible Ink: Spycraft of the American Revolution*, award-winning author John A. Nagy briefly traces the history of spy techniques from ancient China through Elizabethan England before embarking on the various techniques used by spies on both sides of the war to exchange secret information. These methods included dictionary codes, diplomatic ciphers, dead drops, hidden compartments (such as a hollowed-out bullet or a woman's garter), and even musical notation, as well as efforts of counterintelligence, including "Black Chambers," where postal correspondence was read by cryptologists. Throughout, the author provides examples of the various codes and ciphers employed, many of which have not been

previously described. In addition, the author analyzes some of the key spy rings operating during the war, most notably the Culper ring that provided information to Washington from inside British-controlled New York City. Based on nearly two decades of primary research, including the author's discovery of previously unrecognized spies and methods, Invisible Ink is a major contribution to the history of conflict and technology.

PHACT CALENDAR

PhACT Events

Dr. David Cattell, Chairman of the Physics Department of Community College of Philadelphia hosts meetings of PhACT - at 2:00 PM on the third Saturday of most months at Community College of Philadelphia..., Parking is easily available and costs



\$4.00 for all day. Enter the college parking lot on 17th Street which is one way south bound. This meeting site is handicap accessible. **PhACT Meetings are Free and open to the public unless otherwise noted.**

Saturday, January 19, 2013 - "You mean it's not true? Busting media myths." Communications professor and author W. Joseph Campbell debunks prominent media-driven myths -- those well-known stories about and/or by the news media that are widely believed and often retold but which, under scrutiny, dissolve as apocryphal or wildly exaggerated. In Lecture Room C2-28 in the Center for Business and Industry at the corner of 18th and Callowhill Streets. At 2:00 PM. See Page 1 for more details.

Saturday, February 16, 2013 - Professor John Ruscio will discuss **Behavioral Economics and the Libertarian Paternalism Approach to Policy.** The emerging discipline of behavioral economics, which lies at the intersection of psychology and economics, examines ways that cognitive limitations and biases influence decision making. John Ruscio is a psychology professor at The College of New Jersey (TCNJ). In Lecture Room C2-28 in the Center for Business and Industry at the corner of 18th and Callowhill Streets. At 2:00 PM

Saturday, March 16, 2013 - TBA

Saturday, April 20, 2013 - PhACT will participate in the 2013 Philadelphia Science Festival. The Amazing James Randi will be our guest speaker. Stay tuned for details.

Saturday, May 18, 2013 - PhACT will have a expedition to the John Heintz National Waterfowl Refuge.

Don Nigroni will be out guide. More details to follow.

Saturday, September 21, 2013 - AIDS Denialism - Nicoli Nattrass of South Africa will talk on AIDS denialism. Hundreds of thousands of people are thought to have died based on misinformation concerning AIDS and treatments. Learn about how science is reducing the deaths and spread of the disease even though irrationalism has been doing the opposite.

The **PhACT Calendar** is open to members and non-members who wish to announce meetings and events of other groups of which they are interested or affiliated. These events should be of some general interest to the Skeptical or Scientific community and should be within a reasonable radius of Philadelphia. Send submissions to the editor at **phactpublic-ity@aol.com**. Keep the announcements brief. Space is limited and insertions will be made on a first come-first served basis after the needs of PhACT are accomplished. Phactum does not accept paid advertising.



The Philadelphia Area Center for the History of Science (PACHS) maintains a calendar of events about the history of science, technology and medicine that may contain some interesting

events not listed in the Phactum Calendar. Check out their website at:

http://www.pachs.net/events

Monday, January 14, 2013 @ 8:00 pm - 9:00 pm at Delaware County Institute of Science, 11 Veterans Square, Media, PA 19063

http://delcoscience.org

Aerodynamics For the Rest of Us

A lecture by David Bevan, Boeing (Ret.)

Lectures are FREE and presented upstairs in the Lecture Hall. Doors open by 7:30 PM. Lectures begin at 8 PM.

Monday, January 14, 2013 at 6:00 PM at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

Science on Tap is a monthly science café that features a brief, informal presentation by a scientist or other expert followed by lively conversation. Free and open to the public. Must be 21.

http://scienceontapphilly.com/

"3D Printing for the Sweet Tooth: Are Sugar Glass Vascular Networks the Future of Organ Regeneration"

Jordan Miller, PhD will discuss the field of regenerative medicine attempts to replace organ donation with engineered tissues made from a patient's own cells. Jordan Miller will talk about the development and details for 3D printing temporary templates of blood vessels made from sugar for this field, and how this technology impacts the future of organ regeneration research.

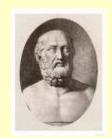
Jordan is a post-doctoral researcher in the Tissue Microfabrication Laboratory at the

University of Pennsylvania, a founding member of Hive76 in Philadelphia, and a RepRap core developer. His research in the department of Bioengineering combines chemistry and rapid prototyping to direct cultured human cells to form more complex organizations of living vessels and tissues. Jordan has been in the 3D maker community since the beginning. He developed the first MakerBot heated build platform at Hive76 and is delighted to use his RepRap 3D printer every day in the lab for biomedical research and regenerative medicine.

This month's Science on Tap is presented by the American Philosophical Society Museum.

Tuesday, January 15, 2013 - 6:00 PM-8:30 PM at The Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway,

SOCRATES CAFE is moderated by: Lewis Mifsud, Ph.D., P.E., a member of PhACT and of The American Academy of Forensic Sciences. At 7:00 PM every Monday evening except holidays (on Tuesdays after a Monday holiday) at the Springfield Township Public Library (215-836-5300) at 1600 Papermill Mill Road, Wyndmoor, PA. 19038. This philosophical discussions group is free and open to the public. Join us



and share your critical thinking, questions and opinions.

Philadelphia, PA 19103 www.ansp.org

Networking reception: 6:00 pm, Program: 6:30 pm

Biologist, author and environmental advocate Sandra Steingraber will discuss water-born toxins and human health.

Environmentalist, author, and cancer survivor, Sandra Steingraber is an internationally recognized authority on the environment links to cancer and human health. She is the author of Living Downstream: An Ecologist's Personal Investigation of Cancer and the Environment and Having Faith: An Ecologist's Journey to Motherhood. She is a columnist for Orion magazine and is currently a scholar in residence at Ithaca College in Ithaca, New York.

Open to the Public. Nonmembers \$15, Members \$10, Drexel students free with ID

Register: http://sandrasteingraber.eventbrite.com/

Wednesday, January 16, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103

http://libwww.freelibrary.org/authorevents/ 215-686-5322

The Art of Tony Auth: To Stir, Inform and Inflame

Pulitzer Prize-winning editorial cartoonist Tony Auth spent more than 40 years at the Philadelphia Inquirer, and is currently the digital artist in

residence at WHYY. His many awards include five Overseas Press Press Club Awards, the Sigma Delta Chi Award, the Thomas Nast Prize, and the Herblock Prize. The Art of Tony Auth: To Stir, Inform and Inflame collects more than 200 political cartoons from across his career and showcases how he reframes the issues of the day with art that is witty, critical, and optimistic.

FREE. No tickets required.

Wednesday, January 16, 2013 at 6:00 pm at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

http://www.penn.museum/events-calendar

"Great Battles" Evening Lecture

The First Crusade: Three Battles for Latin Christendom

From 1096 to 1101, over 100,000 people from all over Western Europe set off towards Jerusalem. These men and women, these warriors and

pilgrims, priests and nuns, lords and laborers, didn't have a name for what they were doing—no one would use the word Crusade to describe an armed pilgrimage, or holy military expedition, until more than another century had passed. Yet the battle that preceded their march, a battle along the way to Jerusalem, and still another after that city was conquered by a tiny remnant of the original force, combined to permanently reshape the nature (both spiritual and physical) of Catholic Europe. Dr. Jessica Goldberg, Assistant Professor, Medieval History, University of Pennsylvania, speaks at this "Great Battles: Moments in Time that Changed History" series lecture program. Admission with advance registration: \$5, general public; \$2, Penn Museum members; \$10 at the door based on availability.

A New Reading Circle: The Institute for Religion and Science.

Our Reading Circle is meeting from 6:30 pm – 8:00 pm beginning in November on the second Monday of the month in the William Walker Room of the Logue Library to discuss **Ilia Delio's** *The Emergent Christ*. If you are interested in joining us, please contact us at **Institute4RS@chc.edu**

See website: www.irands.org

Thursday January 17, 2013 at 6:00 PM-8:00 PM at The Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103 **www.ansp.org**

Urban Sustainability Forum - Next Generation Green

In case you haven't noticed, there are a whole bunch of young people in Philadelphia doing great sustainability work. At our January Urban Sustainability Forum, come hear from several of these leaders about their projects and initiatives.

Bringing fresh ideas, motivation, and the determination to help their communities live more sustainably, Philadelphia's young visionaries are making an impression on those who have been working in the field for years. Their contributions cover a wide range of essential services, ranging from innovations in transportation to agricultural modifications and more. Hear how they are connecting with environmental organizations on college campuses, plus listen to music and spoken word artists from Philadelphia public schools at this lively event.

Free. Register: nextgenerationgreen.eventbrite.com/

Thursday, January 17, 2013 at 6:15 pm at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

http://www.penn.museum/events-calendar

Evening Lecture

Secret of the Great Pyramid

The Great Pyramid of Giza is one of the greatest unsolved mysteries of all time. Egyptologists simply do not know how ancient builders raised thousands of two-ton blocks to the top of a 480-foot pyramid. Beginning in 2003, Dr. Bob Brier, Senior Research Fellow, Long Island University/LIU Post, worked with French architect Jean Pierre Houdin to find evidence for a theory—that hidden inside the pyramid is a mile-long ramp, still waiting to be discovered, which was used to build the structure to such great heights. In this lecture, Dr. Brier discusses recent findings that offer support for this theory. Sponsored by the Philadelphia Chapter of the Archaeological Institute of America.

Free admission. For more information, call 215.898.2680.

PhACT Event

Saturday, January 19, 2013 at 2:00 PM

"You mean it's not true? Busting media myths."

Communications professor and author W. Joseph Campbell debunks prominent media-driven myths.

See Page 1 for more details.

Saturday, January 19, 2013 at 1:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

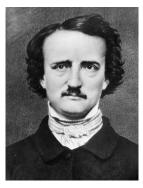
http://www.thelaurelhillcemetery.org

EDGAR ALLAN POE: A BIRTHDAY TRIBUTE

From 1838 through 1844, Edgar Allan Poe found his home in Philadelphia. During those six years, he produced some of his best-known and most haunting works, including "The Tell-Tale Heart," "The Pit and the Pendulum," and "The Fall of the House of Usher." While no written proof of such has yet been uncovered, many have speculated that Poe's tales may have been inspired amidst the graves and gardens of Laurel Hill Cemetery. Newly opened when Poe took up residence in the city, the famed necropolis could draw more than 150,000 visitors in one season

alone... Surely, Poe could well have been among those curious souls.

This wintertime walking tour of Laurel Hill will focus on what history has revealed to us of Poe's time in Philadelphia – on the literature he produced, and of the friends, associates and enemies who traveled within his circles. Many of these individuals now reside permanently at Laurel Hill, including Henry Beck Hirst, Joseph Clay Neal and George Rex Graham. This month marks the 204th anniversary of Poe's birth in Boston on January 19, 1809. The tour will conclude with a vinous toast in his memory.



The tour will depart from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$12/person; or \$10/students and seniors. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online. Guides: David Horwitz, Ph.D. and Carol R. Yaster

Wednesday, January 23, 2013 at 7:15 PM at Brittingham's Irish Pub and Restaurant, 640 East Germantown Pike, Lafayette Hill, Pennsylvania. (610)828-7351.

American Revolution Round Table of Philadelphia,

http://arrtop.com/

Mike Kochan will speak on his new book *The Turtle*.

Friday, January 25, 2013 at 10:00 am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

http://www.thelaurelhillcemetery.org

MONTHLY FOURTH FRIDAY TOUR: HOT SPOTS and STORIED PLOTS

Join Laurel Hill Cemetery for this informative overview of Laurel Hill's long and colorful history, which will include many of the marble masterpieces, stunning views and legendary stories that afford the cemetery its WOW factor. This is the perfect tour for first-time visitors to Laurel Hill, and anyone else who enjoys beautiful art, scenic nature and fascinating history. BRAND NEW "Hot Spots and Storied Plots" will be presented monthly as part of Laurel Hill Cemetery's Fourth Friday tour series, which take place on the fourth Friday of every month at 10:00am. January's walking tour will depart from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is

located in the lot across the street from the Gatehouse. The cost is \$8/person general admission. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online.

Guide: Rich Wilhelm

Sunday, January 27, 2013 - 1:00PM-3:00PM at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

http://www.fi.edu

Kitchen Science

Once a month, we showcase kitchen science on Saturday afternoons. These fun- and flavor-filled events engage you in an exploration of food science through hands-on, tastebud-activating activities that help you understand the science behind food and cooking. Acids and Bases: Sunday, January 27

Engage in an exploration of food science by taking part in hands-on, taste-bud activating activities that will enhance your understanding of the science behind food and cooking. Learn why some foods taste sour, bitter or sweet. Test the pH of common foods and learn more about their chemical makeup.

Free with Museum Admission

Sunday, January 27, 2013 at 1:30pm at Upper Moreland Library, 109 Park Avenue, Willow Grove, PA. Humanist Association of Greater Philadelphia http://www.hagp.org/

Katherine Stewart speaks about The Good News Club: The Fundamentalist Assault on Public Education.

Free and open to the public.

Monday, January 28, 2012 at 6:30PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

http://www.collphyphil.org/prog calendar.htm

A Staged Reading of Begotten Not Made by Paul Meade

Begotten Not Made by Paul Meade is the culmination of a playwriting competition commissioned by The Irish Council of Bio-Ethics. This unique initiative presents an intersection between science and the arts and allows for the possibility of exploring challenging philosophical and medical themes in a theatrical form. The play consists of three interwoven stories. The first relates to a successful couple who are struggling to conceive a child through IVF; the second is the story of a married couple who are travelling to Switzerland for an assisted suicide; the third strand tells the story of a brother and sister, one of whom was born as a 'saviorsibling' for the other, for the use of stem-cells. There will be a staged reading of the play followed by a talk with the playwright.

Paul Meade is a writer, director, actor and artistic director of Gúna Nua theatre. From Limerick, Paul trained at the Samuel Beckett Centre, Trinity College, and later received an M.A. in modern drama from U.C.D. Work as a writer includes: Scenes From a Water Cooler, Skin Deep, Thesis, and Trousers.

Inis Nua Theatre Company is Philadelphia's home for contemporary plays from Ireland, England, Scotland and Wales. Now in its ninth year, Inis Nua performs at the newly created Off-Broad Street Theater at 17th and Sansom Street.

Free and open to the Public.

To register: http://begottennotmade-eorg.eventbrite.com/#

Tuesday, January 29, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103

http://libwww.freelibrary.org/authorevents/ 215-686-5322

Heart of Darkness: Unraveling the Mysteries of the Invisible Universe

One of the first cosmologists to suggest that galaxies are immersed in large halos of dark matter, Jeremiah Ostriker has been an influential researcher in the most exciting areas of modern astrophysics and cosmology. His areas of study include the structure and oscillations of rotating stars, dark matter and dark energy, pulsars, x-ray binary stars, the Warm-Hot Intergalactic Medium, gravitational lensing, astrophysical blast waves, active galactic nuclei, the cosmic web, galaxy formation, and black hole growth. Ostriker's many awards for a lifetime of scientific contributions include the Bruce Medal and the National Medal of Science. He serves as Treasurer of the National Academy of Sciences and is the author of more than 500 scientific publications. Coauthored with Simon Mitton, Heart of Darkness tells how scientists across history have worked to piece together the cosmic structure of the universe.

In conversation with Gino Segre, Professor of Physics Emeritus, University of Pennsylvania

FREE. No tickets required. For Info: 215-567-4341.

Wednesday, January 30, 2012 at 11:00 AM to noon at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

http://www.collphyphil.org/prog_calendar.htm

Philadelphia Public School Presentation with Superintendent William H. Hite, Jr.

Dr. William R. Hite Jr. was named Superintendent of The School District of Philadelphia on June 29, 2012. Dr. Hite will be sharing his vision on health and education in a presentation at The College of Physicians of Philadelphia on January 30th, 2013 at 11am. About the Speaker: Dr. William R. Hite Jr., is the current Superintendent of The School District of Philadelphia. A member of numerous national, state and local boards, Dr. Hite received a bachelor's degree in education from Virginia Tech and a master's degree in educational leadership from the University of Virginia. He earned a doctorate in education specializing in educational leadership from Virginia Tech.

Free and open to the Public.

To register: http://www.eventbrite.com/event/4974689430/eorg#

Thursday, January 31, 2013 at 12:00PM at the Free Library of Philadelphia, 1901 Vine Street, 19103 http://libwww.freelibrary.org/ **authorevents**/ 215-686-5322

General Stanley McChrystal | My Share of the Task

"A legendary warrior with a fine eye for enduring lessons about leadership, courage, and consequence" (Tom Brokaw), General Stanley McChrystal retired in July 2010 as a four-star general in the United States Army after serving as the top commander of U.S. forces in Afghanistan and the commander of the International Security Assistance Force. The former director of the Joint Staff and commander of the Joint Special Operations Command, he is a senior fellow at Yale University's Jackson Institute for Global Affairs and the cofounder of the McChrystal Group, a leadership consulting firm. Taking its title from the official U.S. Army Ranger Creed, My Share of the Task explores the major episodes and controversies of an eventful career.

In conversation with Mark Bowden, bestselling author of Black Hawk Down and The Finish.

FREE. No tickets required. For Info: 215-567-4341

Tuesday, February 5, 2013 (Snow Date: February 19, 2013) at 7 PM at Chestnut Hill College, Commonwealth Chateau (Bldg. 20), Sugar Loaf Campus, 9230 Germantown Avenue, Philadelphia, PA 19118.

http://www.irands.org

This lecture is presented by The Institute for Religion and Science hosted by Chestnut Hill College.

"Darwin and Religion: Rumors of Warfare in a Post-Darwinian Age,".

A lecture by Edward Davis, Ph.D., Professor of the History of Science and Director, Central PA Forum for Religion and Science, Messiah College.

What does Darwin mean for religion? Are Christianity and evolution inevitable foes? Is the famous "warfare" thesis of Andrew Dickson White the best description of what has taken place and what must happen in the future? This lecture looks closely at what White actually said and relates this to historical and contemporary examples of what evolution has actually been said to mean for Christian beliefs. Four main patterns emerge: conflict resulting in the rejection of evolution as valid science, conflict resulting in the outright rejection of most types of theism as contradictory to science, conflict resulting in the rejection of divine transcendence and the wholesale reformulation of traditional theological beliefs, and complementarity in which traditional theological beliefs are affirmed alongside scientific conclusions, in what looks more like genuine dialogue than any of the other patterns.

Open to the public. For those who are able to contribute to our efforts, a Free Will Donation is requested.

The Delaware Valley Amateur Astronomers is a group of enthusiastic hobb Philadelphia. The DVAA re free and the public is invited to attend. Meet talk on "what's up" in the sky cur professional astronomer or men eature a short l as a talk by a DVAA or neighboring club Unless otherwise eetings will b held on the third Friday of end in the Upper Merion Township Road, King of Prussia, PA 19406 Meetings start at 7:00 with Announcements and the main e Freedom Hall, 75 W. Valley Forge an talk begin at 7:30 sharp.

ents are listed

Refreshments are provided. Upcoming clube

on the DVAA website: http://dvaa.org

Tuesday, February 5, 2013 at 7:00 PM at the Washington Memorial Chapel at Valley Forge.

http://www.friendsofvalleyforge.org/speaker-series.shtml

Daniel K. Richter, Director of the McNeil Center for Early American Studies, will discuss Native Americans' American Revolution. During the era that created the United States, Native Americans also lived through a period of revolutionary transformations. As was the case with Americans of European and African descent, Americans Indians, too, were fighting for control of their lands, communities, and futures, and doing so not only on the battlefield but also, and often more importantly, in the realms of politics and culture. That most Native Americans allied themselves with the British against the U.S. was no accident. And that Indians' fundamental goals were often utterly incompatible with those of the U.S. Revolutionaries only drives home the importance of understanding how Native and colonial experiences intertwined to create the phenomenon we call the American Revolution.

For directions visit: http://wmchapel.org/contact-us/ Free and open to the public.

Tuesday, February 5, 2013 at 12:00 to 1:00 p.m at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106 Tel: 215-925-2222 • http://www.chemheritage.org

"Early Periodic Tables of the Elements: Classification, Visualization, and the Periodic Law"

A talk by Ann Robinson

The periodic table of the elements is a visual representation of the periodic law, the classification scheme that lies at the heart of chemistry. The table we are all familiar with did not assume its shape until the early to mid-20th century. In the decade before the 1869 discovery of the periodic law by the Russian chemist Dmitri Mendeleev and in the decades following, scientists created (and are still creating) their own visual representations of the periodic law. This talk will look at some of these early tables, including Mendeleev's own, exploring why different forms were thought to be better than others for visually representing the classification of the elements.

Ann Robinson is a former academic librarian and is currently a Ph.D. candidate in history at the University of Massachusetts, Amherst. She has a B.A. in history from the University of California, San Diego; an M.L.I.S. from San Jose State University; and an A.L.M. in the history of science from Harvard University's Extension School. She is writing a dissertation currently titled "Creating a Symbol of Science: The Standard Periodic Table of the Elements" that explores chemical pedagogy, visualization and graphic representation, classification and organization, and the role of national and international scientific organizations in relation to the periodic table of the elements.

Free and open to the public.

Wednesday, February 6, 2013 at 7:00 PM at Frankford Hall on Frankford Avenue just north of Girard Avenue.

Philadelphia Nerd Nite

For more information see the website at

http://philadelphia.nerdnite.com/updates/

Admission is \$5.00, all are welcome. Great food and beer is available in addition to the company of fellow Nerds.

Be there and be square!

The next Nerd Nites are on March 6 and April 3, 2013 so be Nerdy and mark your calendars.

Wednesday, February 6, 2013 at 6:00 pm at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

http://www.penn.museum/events-calendar

"Great Battles" Evening Lecture

From Actium to an Asp: The Beginning of the End for Cleopatra the Great

In the years following the death of Julius Caesar in 44 BCE, internal Roman power struggles—combined with the increasingly negative response to Cleopatra VII and Marc Antony's romantic partnership—led to the deterioration of the relationship between Egypt and Rome. The conflict ultimately came to a head with the Battle of Actium in September of 31 BCE, in which the Egyptian forces were decimated at sea by the Romans—with Cleopatra and Marc Antony barely escaping with their lives. The aftermath of this battle set the course for the final desperate year of Cleopatra's life. Dr. Jennifer Wegner, Associate Curator, Egyptian Section, speaks at this "Great Battles: Moments in Time that Changed History" series lecture program.

Admission with advance registration: \$5, general public; \$2, Museum members; \$10 at the door based on availability.

Thursday, February 7, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103

http://libwww.freelibrary.org/authorevents/ 215-686-5322

Deborah Willis and Barbara Krauthamer | Envisioning **Emancipation: Black Americans and the End of Slavery**

An art photographer and one of the nation's leading historians of African American photography, Deborah Willis is University Professor and Chair of the Department of Photography and Imaging at the Tisch School of the Arts at New York University. Barbara Krauthamer teaches history at the University of Massachusetts, and has authored a number of articles on the subjects of slavery in Indian Territory and the intersections between African American and Native American cultures. Willis and Krauthamer's visual new book, Envisioning Emancipation: Black Americans and the End of Slavery, examines photographs that articulate the public and private lives of free and enslaved African Americans during the Civil War

FREE. No tickets required. For Info: 215-567-4341.

Saturday, February 9, 2013 at 1:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

http://www.thelaurelhillcemetery.org

TIL DEATH DO US PART:

THE LOVE STORIES OF LAUREL HILL A VALENTINE'S TOUR and RECEPTION

Love and Death are the preferred subjects of poets and philosophers

across eras and oceans subjects intertwined in their great mystery, in their power to inspire, to destroy and to change our worlds forever. Considering this, the notion of marking the "spirit" of Valentine's Day in a cemetery seems natural, after all.

Laurel Hill's Valentine's Day wintertime walking tour



was inspired by the little-known story of a little-known woman whose heart – and only her heart – now lies buried beneath the cemetery's earth. Learn about her symbolic, final gesture, and other tales of love as varied as the souls from which they transpired. Some love is eternal; some love ends; and some love ends badly. Devotion, passion and faith prove to sway destinies as much as greed, lust and betrayal. Those stories that do not warm your own heart will entertain and tantalize instead. The tour will conclude with a toasty, fireside reception replete with wine, hot chocolate and hors d'oeuvres.

The tour will depart from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$20/person; or \$18/students and seniors. Advance registration is requested. Tickets should be purchased in advance by phone (215) 228-8200 or online.

Guide: Gwen Kaminski

Sunday, February 10, 2013 at 2:00 pm at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104 http://www.penn.museum/events-calendar

Afternoon Lecture Deciphering the Lod Mosaic

Highway construction in Lod, Israel in 1966 accidently unearthed a large and well-preserved Roman mosaic that probably once decorated a large audience room. The mosaic dates to circa 300 CE and features a kind of arena of ferocious animals, including a lion and lioness, an elephant, a giraffe, a rhinoceros, a tiger, and a wild bull. In this lecture, Dr. C. Brian Rose, Curator-in-Charge, Mediterranean Section, explores why decorative motifs of this kind were held in such high esteem during the Roman Empire. That exploration leads us into the world of gladiatorial games, the wild animal export industry, and mythological charades in ancient Rome. Free with Museum admission. For more information, call 215.898.2680.

Monday, February 11, 2013 at 6:00 PM at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

Science on Tap is a monthly science café that features a brief, informal presentation by a scientist or other expert followed by lively conversation. Free and open to the public. Must be 21.

http://scienceontapphilly.com/

Monday, February 11, 2013 @ 8:00 pm - 9:00 pm at Delaware County Institute of Science, 11 Veterans Square, Media,PA 19063 http://delcoscience.org

A Brief Look at Both Yellowstone & Grand Tetons National Parks a lecture by "Doc" Timothy Folkmer, Ed.D., Marple Newtown School District (Ret.)

Lectures are FREE and presented upstairs in the Lecture Hall. Doors open by 7:30 PM. Lectures begin at 8 PM.

Wednesday, February 13, 2013 Lecture at 5:30 PM at the Wagner Free Institute of Science, 1700 West Montgomery Avenue, , Philadelphia, PA 19121

ph 215-763-6529 www.wagnerfreeinstitute.org

"pOrnithology": the Birds and the Birds and the Bees An Illustrated Lecture by GEORGE ARMISTEAD

What does bird foreplay look like? We need only listen to the birdsong outside our window, glimpse a display of colorful feathers in the trees, or find an intricate nest in early spring. These courtship rituals, which come in many forms, serve to attract a mate for reproduction. Natural selection drives sexual dimorphism within bird species and shapes the tremendous diversity in appearance, song, and behavior between species. George Armistead will review the various, interesting reproductive strategies and associated unusual behaviors of birds—along with copious innuendo and anthropomorphism to keep the concepts in perspective.

George Armistead is the Events Coordinator for the American Birding Association. Prior to that, he guided birding tours for ten years, leading trips to all seven continents. He is also a Research Associate at the Academy of Natural Sciences of Drexel University. When not working on bird book projects, he spends his free time observing and photographing birds at his favorite haunts along the coast between Cape May, NJ, and Cape Hatteras, NC.

Free and open to the Public.



In a spectacular courtship display, male nighthawks will dive from great heights and change course just before crashing into the ground. The abrupt change in direction creates a loud, booming sound as wind rushes over the wings. Image from American Ornithology; or, The Natural History of the Birds of the United States by Alexander Wilson. Philadelphia: Harrison Hall, 1829. Collection of the Wagner Free Institute of Science Library.

Calling All Astronomers! Rittenhouse Astronomical Society



Monthly Meetings! Bring all of your out-of this-world questions! Join The Rittenhouse

Astronomical Society the second Wednesday of each month at 7:30 p.m. in the Fels Planetarium at the Franklin Institute. The society offers all persons an opportunity to participate in the activities of an astronomical group at the laymen's level. They aim to spread knowledge, awareness and enjoyment of astronomy and astronomical issues. It is a popular science club that keeps its members up-to-date on the latest developments. No experience is necessary to attend the FREE meetings. Come with your astronomy questions!

www.rittenhouseastronomicalsociety.org/

Wednesday, February 13, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103

http://libwww.freelibrary.org/authorevents/ 215-686-5322

Neil Shubin | The Universe Within: Discovering the Common History of Rocks, Planets, and People

Evolutionary biologist Neil Shubin was a member of the field team that made the 2004 landmark discovery of Tiktaalik roseae, a fossil fish dubbed the "missing link" between fish and land animals. The bestselling author of *Your Inner Fish*, Shubin teaches Organismal Biology and Anatomy at the University of Chicago, where he also serves as an associate dean. He has

conducted field work in Greenland, China, Canada, North America, and Africa. His new book, The Universe Within makes clear the profound connection between the evolution of the cosmos and the human body. Carl Zimmer writes, "We are



stardust,' goes the old song, but most of us don't give the fact much thought. The Universe Within will change that."

FREE. No tickets required. For Info: 215-567-4341.

Tuesday, February 19, 2013 at 12:00 to 1:00 p.m. at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106 Tel: 215-925-2222 • http://www.chemheritage.org

"Visualizing Vapors: The Shift from Smell to Smoke in Defining Air Quality"

A talk by Max Liboiron

How did a mid-19th-century concern with stench become a Progressive Era fight against smoke? Why did smoke transform from a symbol of civic pride and progress to the harbinger of a polluted atmosphere? This talk provides one answer to these questions by closely examining the connections between anti-stench and anti-smoke agitation. Rather than viewing the anti-smoke crusades as a departure from earlier complacency about industrial pollution, this talk situates the fight against smoke as a direct outgrowth of earlier worries about bad odors. The talk focuses on the significant role the graphic press played in the transition from smell to smoke. The demands of a visual medium mandated sensory translation; as artists tried to illustrate the New York City health concerns about Hunter's Point, they sought an iconography for smell and found their answer in billows of smoke. By focusing on the interplay between the senses of smell and sight, this talk-and its many illustrations-explain the historically contingent reasons that visions of smoke, rather than stenches of industry, launched a widespread campaign for improved air quality.

Max Liboiron is a postdoctoral fellow in the Department of Media, Culture, and Communication at New York University with the Intel Science and Technology Center for Social Computing. She is currently researching theories of scale in relation to environmental action. Her dissertation, "Redefining Pollution: Plastics in the Wild," investigates scientific and advocate definitions of plastic pollution given that plastics are challenging centuries-old concepts of pollution as well as norms of pollution control, environmental advocacy, and concepts of contamination. Her work has been published in the Canadian Journal of Cultural Studies, Social Movement Studies: Journal of Social, Cultural and Political Protest, and the Encyclopedia of Consumption and Waste: The Social Science of Garbage. She writes for the Discard Studies Blog and is a trash artist and activist. Visit www.maxliboiron.com.

PhACT Event

Saturday, February 16, 2013 - at 2:00 PM

Professor John Ruscio, a psychology professor at The College of New Jersey, will discuss:

Behavioral Economics and the Libertarian Paternalism Approach to Policy

Free and open to the public.

Wednesday, February 20, 2013 from 6:30 PM to 8:30 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

http://www.collphyphil.org/prog_calendar.htm

The Jewish Problem in American Medical Education and Its Modern **Implications**

Discriminatory quotas designed to limit the access of Jews to medical school were put in place in Europe in the late 19th century and spread to the United States by the 1920s. They remained in force in the United States through the 1960s and extended to graduate medical education and the granting of clinical privileges in hospitals. Anti-Semitism in the United States was also a contributor to the creation of a network of Jewish hospitals. The speaker will trace the rise and fall of anti-Semitism in medical education and the responses of the American Jewish community and state and local government. He will conclude with a discussion of the implications of this story for the present.

Edward C. Halperin, MD, MA, Chancellor for Health Affairs/Chief Executive Officer, Professor of Radiation Oncology, Pediatrics, and History, New York Medical College, Provost for Biomedical Affairs, Touro College and University.

Free and open to the public.

To register: http://halperin.eventbrite.com

Friday, February 22, 2013 at 10:00 am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

http://www.thelaurelhillcemetery.org

MONTHLY FOURTH FRIDAY TOUR SERIES: HOT SPOTS and STORIED PLOTS



Join Laurel Hill Cemetery for this informative overview of Laurel Hill's long and colorful history. which will include many of the marble masterpieces, stunning views legendary stories that afford the cemetery its WOW factor. This is the perfect tour for first-time visitors to Laurel Hill, and

anyone else who enjoys beautiful art, scenic nature and fascinating history. BRAND NEW "Hot Spots and Storied Plots" will be presented monthly as part of Laurel Hill Cemetery's Fourth Friday tour series, which take place on the fourth Friday of every month at 10:00am.

February's walking tour will depart from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$8/person general admission. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online. Guide: Michael Brooks, Ph.D.

Monday, February 25, 2013 from 6:30 PM to 9:00 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

http://www.collphyphil.org/prog calendar.htm

Screening of Contagion at The College of Physicians of Philadelphia Join us for a special screening of the film Contagion in honor of Anne Schuchat, MD, Director of the National Center for Immunization and

Respiratory Diseases at the Centers for Disease Control, this year's Rhodes Medal Recipient and inspiration for Kate Winslet's character in the movie Contagion.

Contagion follows the rapid progress of a lethal airborne virus that kills within days. As the fast-moving epidemic grows, the worldwide medical community races to find a



cure and control the panic that spreads faster than the virus itself. At the same time, ordinary people struggle to survive in a society coming apart. Open to the Public. Admission fee \$5.00.

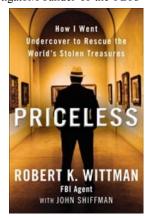
To register: http://contagioncpp.eventbrite.com/#

Wednesday, February 27, 2013 at 6:00 pm at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104 http://www.penn.museum/events-calendar

Year of Proof Lecture

"Recovering the Priceless: The Proof is in the Undercover Operation to Regain our Heritage!"

Robert K. Wittman, former Senior Investigator/Founder of the FBI's National Art Crime Team and author of the New York Times bestseller, "Priceless: How I Went Undercover to Rescue the World's Stolen Treasures," is responsible for the recovery of more than \$300 million worth of stolen art and cultural property. As an FBI Special Agent, Wittman conducted investigations throughout the world, often working undercover to rescue artifacts that ran the gamut from stolen Rembrandt's, to tomb-robbed ancient Peruvian golden artifacts, to Geronimo's eagle-feathered war bonnet. In this engrossing lecture, Wittman talks about the "proofs" necessary to solve these types of cases and the lengths to which investigators must go to get the job done.



Free admission. Registration suggested. For more information, call 215.898.2680.



\$10 for students which include	and would like to join/rejoin for the next year. The des e-mail delivery of Phactum. y annual membership is \$25. Checks should be pa	-
membership.	enclosed to pay for years ofenclosed for additional supportdedicated for High School Science Fair prizes	Mail checks to: PhACT 653 Garden Road Glenside, PA 19038
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The Philadelphia Association for Critical Thinking is grateful for the hospitality extended by Community College of Philadelphia and especially Dr. David Cattell, Chair of the Physics Department, for hosting PhACT and giving us access to such excellent facilities. Part of CCP's mission is to serve Philadelphia as a premiere learning institution and PhACT is pleased to support this goal by hav-

ing talks on wide ranging, engaging, and educational topics.

PhACT's High School Science Fair Student Prize Funds

 Prizes awarded in 2010
 = \$ 300.00

 Prizes awarded in 2011
 = \$ 500.00

 Prizes awarded in 2012
 = \$ 150.00

 Total 2013 Prize Fund
 = \$ 163.00

Please donate. Small contributions are preferred and donations in excess of the 2013 goal will be applied to the 2014 Prize Fund or some other youth science education project not yet determined.

ALL money collected for this project will be used for student prizes. PhACT members and others are invited to participate as judges. Contact Eric Krieg for more information: erickrieg@verizon.net

Phactum is, in theory, distributed 6 times a year and is the main propaganda organ for the Philadelphia Association for Critical Thinking.

If you are not a supporting member/subscriber we invite you to become one. \$15 for a one year membership to PhACT with email Phactum subscription. \$25 for US Mail subscription. Donations are welcome.

Send letters of rebuttal, ideas, short essays, poetry, opinion pieces, complaints, and lavish praise to Ray Haupt, Phactum editor, at phactpublicity@aol.com.

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