

"The lessons of paternalism ought to be unlearned and the better lesson taught that while the people should patriotically and cheerfully support their Government its functions do not include the support of the people."

~ President Grover Cleveland, second inaugural address, March 4, 1893.

Phactum

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

February 2013

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Webmaster: Wes Powers <http://phact.org/>

PhACT Meeting - Saturday, February 16, 2013

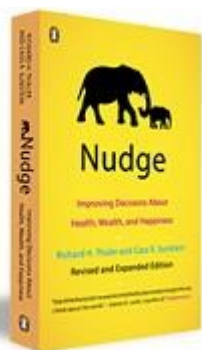
at Community College of Philadelphia in Lecture Room C2-28 in the Center for Business and Industry at the corner of 18th and Callowhill Streets. At 2:00 PM.

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. John Ruscio, a psychology professor at The College of New Jersey (TCNJ).

Behavioral Economics and the Libertarian Paternalism Approach to Policy



Professor John Ruscio will discuss 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. In an attempt to encourage people to make better choices, Richard Thaler and Cass Sunstein advanced an approach to policy-making called "libertarian paternalism." They contend that this is not an oxymoron, that "nudges" can steer people toward more rational choices (the paternalistic aspect) while preserving freedom of choice (the libertarian aspect). For example, changing the default option for organ donation (e.g., moving from an opt-in to an opt-out or a forced-choice system) can bring people's choices into better alignment with their

(Continued on page 2)

"The only freedom which deserves the name is that of pursuing our own good in our own way, so long as we do not attempt to deprive others of theirs, or impede their efforts to obtain it. Each is the proper guardian of his own health, whether bodily, or mental or spiritual. Mankind are greater gainers by suffering each other to live as seems good to themselves, than by compelling each to live as seems good to the rest."

~ John Stuart Mill (1806 - 1873), British philosopher and political economist

own preferences. The same options are available, but it becomes easier to become a donor than under the traditional system in which extra steps must be taken (e.g., obtaining, completing, and returning a form). This approach to policy has generated considerable enthusiasm and in many contexts it holds great promise for improving decisions. However, it raises a number of concerns that have received little attention. For example, policy-makers are subject to the same limitations and biases as anyone else, so what assurance does one have that nudges will in fact lead to more rational decisions? What will prevent a gentle nudge from becoming a more coercive shove? Might nudges reduce the incentives and opportunities to think carefully and learn from one's mistakes? Drawing from theory and research in behavioral economics, the promises and the pitfalls of adopting a libertarian paternalism approach to policy-making will be discussed.

John Ruscio is a psychology professor at The College of New Jersey (TCNJ). His enduring scholarly interests involve the development, evaluation, and application of quantitative methods in social science research as well as basic and applied topics in the study of human judgment and decision making. His published work includes dozens of papers in peer-reviewed journals, books on critical thinking and myths of popular psychology, and four articles for the *Skeptical Inquirer*. At TCNJ, he offers a freshman seminar entitled "The Price of Everything" that introduces basic

economics principles and examines their application to environmental, health care, and other policy issues. He also teaches a course on statistics and a senior seminar on behavioral economics for psychology majors.

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Differentiating paternalism of a father versus the paternalism of the state

"Over these is elevated an immense, tutelary power, which takes sole charge of assuring their enjoyment and of watching over their fate. It is absolute, attentive to detail, regular, provident, and gentle. It would resemble the paternal power if, like that power, it had as its object to prepare men for manhood, but it seeks, to the contrary, to keep them irrevocably fixed in childhood ... it provides for their security, foresees and supplies their needs, guides them in their principal affairs...

The sovereign extends its arms about the society as a whole; it covers its surface with a network of petty regulations—complicated, minute, and uniform—through which even the most original



minds and the most vigorous souls know not how to make their way... it does not break wills; it softens them, bends them, and directs them; rarely does it force one to act, but it constantly opposes itself to one's acting on one's own ... it does not tyrannize, it gets in the way: it curtails, it enervates, it extinguishes, it stupefies, and finally reduces each nation to being nothing more than a herd of timid and industrious animals, of which the government is the shepherd."

~ Alexis de Tocqueville (1805-1859), French political philosopher, sociologist, and historian

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Letters to the Editor

Editor: I have to respectfully differ with Howard J. Wilk's characterization of evolution as semi-unfalsifiable. While I agree with his conclusion that evolution is an inevitable outcome of a number of fully falsifiable (yet unfalsified!) claims, I do take issue with a couple of the initial premises. Let's first clarify that "evolution," meaning "change in relative gene frequency over generations" is an observable fact that anyone can independently verify or confirm with basic thought experiments (e.g., there are more poodles than there were 500,000 years ago). The complex set of predictions, hypotheses, and theories within the meta-theory of evolution are so specific as to be eminently vulnerable to falsifiability and disproof, yet no foundational tenet of the theory has ever been kicked out from under it. In the words of evolutionist J.B.S. Haldane, one finding of "fossil rabbits in the pre-Cambrian," that is, modern species where only ancient species are predicted to be found, would deal a crippling blow to the theory, yet never has this finding occurred.

HJW seems to be referring, at least in the letter, to specific (strongly supported) principles within the theory of natural and sexual selection. I am a student and researcher of evolution and behavior, a field which has recently gotten most of the flak (within academia) that biological evolution used to get during the first decades after its proposal by Darwin (especially when the evolutionary lens is turned to human behavior). Suffice it to say that the field of behavioral ecology, which deals with how evolution shapes animal behavior, is one of the exemplars of scientific diligence, and thus a far cry from demonstrating a "heads I win, tails you lose" approach to hypothesis testing. To address just the example put forth, specific features of a species' life-history and particular environment influence their coloration in predictable and testable ways. If an organism does not benefit from the attractiveness that bright colors confer (e.g., it is in a predator-rich environment, or it doesn't stand to gain fitness benefits by attracting and mating with many individuals), natural selection will shape it to be duller, to avoid predation. This is why males are often ornamented and bright, while females are not. In fact, experimentally brightened animals often get more mates, but are also more noticeable to predators, showing a tradeoff. When these patterns do not hold, evolutionarily consistent reasons almost always are found. In the case that science has not discovered them yet, they are known as paradoxes...evolutionists do not make up reasons to fit aberrant cases into scientific thinking.

While there may exist particular bad hypotheses within the field of evolutionary study that are unfalsifiable, this is true of all science. However, the example mentioned and almost every other prediction of evolution in general, as well as the theory of evolution by natural selection in particular, are highly testable and falsifiable, yet have never been falsi-

fied.

Daniel J. Glass, M.A., Boston

Co-Editor, EvoS Journal: The Journal of the Evolutionary Studies Consortium (www.evostudies.org)

Editor: Jennifer A. Mather et al noted in *Octopus: The Ocean's Intelligent Invertebrate* (2010) that "Few have ever seen a live adult giant squid, despite sailors' tales and several well-funded expeditions to find one using manned submersibles, ROVs, and even cameras mounted on sperm whales." The giant squid was not scientifically named until 1857 by Japetus Steenstrup and was subsequently thought to provide an explanation for the Kraken and various sea serpent sightings. Richard Ellis in *The Search for the Giant Squid* (1998) wrote that giant squid were "appearing all over the beaches and shallows of Newfoundland from 1871 to 1881." Scientists had numerous carcasses to study but wanted to also observe live specimens. However, it wasn't until September 2004 that the Holy Grail of natural history photography was finally obtained, namely, a sequence of still photos of a live giant squid. Then in July 2012 one was filmed (<http://theweek.com/article/index/238452/watch-the-first-ever-footage-of-the-legendary-giant-squid-in-its-natural-habitat>). That story will be told on January 27, 2013 at 8:00 pm when the Discovery Channel airs *Monster Squid: The Giant is Real* (<http://press.discovery.com/us/dsc/programs/monster-squid-giant-real/>).

Nonetheless, now that this feat has been accomplished, the next Holy Grail of natural history photography will surely be capturing on camera by hook or by crook or by using ROVs, submersibles or even sperm whales a titanic struggle



between a sperm whale and its favorite prey, the giant squid, in the deep sea. Sucker marks from giant squid were known to appear on sperm whales, presumably received during the battle between

them, which, it was thought, the giant squid always lost. And scientists know that by attaching a camera to a sperm whale they might someday be able to photograph an enormous giant squid in the deep ocean while it is being attacked by a gigantic sperm whale!

Don Nigroni

Glenolden, PA

Editors note: Cryptozoology certainly does capture the imagination and this revelation is significantly more authoritative than Kirk Douglas wrestling the Giant Squid in *20,000 Leagues Under the Sea*. It seems that up to now a good portion of our "knowledge" of these creatures has come from myth and movies. Now that this discovery has been made off

the coast of Japan, and the devastating Tsunami and nuclear plant melt down have occurred then surely a new movie, *Godzilla vs the Kraken* is inevitable.

Editor: I came across an article in the DANA Foundation publication "Brain in the News" that at once startled me and gave me that uneasiness that defies description.

The original study began at the Harvard Medical School several years ago by Andrew Lim, then a post-doctoral fellow working in the the the lab of Dr. Clifford Saper, MD, Ph.D. and Chief of Neurology. The original research project was designed to investigate the if there were identifiable precursors to Alzheimer's disease and Parkinson's disease. As part of the research, participants wore wristbands called "actigraphs" to help researchers accurately analyze circadian behaviors such as sleep-wake cycles. In addition, the altruistic participants agreed to donate their brains for analysis post-mortem. Previous research with twins had suggested that there could be a genetic component influencing our earliness or lateness, and that also implies heritability. The concurrent

work into understanding our circadian rhythms began with the intent of finding why older people had such chronic problems with getting a good night's sleep. The volunteers were all healthy 65 year-olds, and there were 1,200 participants in the study carried out at Rush University in Chicago. And here's where the unexpected twist comes in.

In a serendipitous moment, Dr. Lim had found out that all the participants had their DNA genotyped. Teaming up with researchers from Brigham and Women's Hospital, they compared their sleep-wake behaviors to their genotypes. Their findings were verified using a group of young volunteers as a control group.

What these genotypes revealed was that a genetic variation near a gene called "Period 1" affected people's sleep-wake cycles making them either early risers or night owls. Statistically 36% of people have the A-A variation, 16% have the G-G variation, and 48% have the A-G variation. The A-As woke up an hour earlier than those with the G-G variety. The A-Gs woke exactly in between the two. All this may seem just an interesting curiosity, except for the follow-up

“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

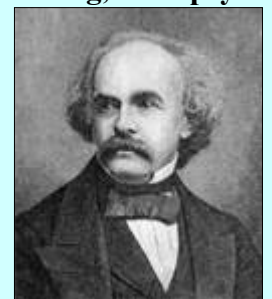
There is power in words and 19th century American fiction writer Nathaniel Hawthorne understood that very clearly. Few possess fluent writing skills comparable to Hawthorne but we all can use the power of words if we so desire and apply our minds. We invite you as a Phactum reader to take pen to paper 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. Hawthorne's works were mainly fiction, often dark, brooding, and psychological, dwelling on themes of good and evil, sin, and retribution. Hawthorne's 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.



work done 15 years after the study began. As all the participants were 65 at the beginning of the study most, if not all, had died in the ensuing 15 years. What the follow up research found was that those people with the A-A or A-G variation died on average at 11 am. The people with the G-G allele died a full six hours later, or just before 6 pm.

All of our biological processes adhere to our circadian clock or rhythm. But this was totally unexpected to me, a consequence I had never even entertained. Many if not most people have reasons for not wanting to know the details of their genome, and for a variety of reasons. But in general, I think it stems from a fear of finding out something about ourselves we'd just rather not know about until we have to. This would be one of them.

Tom Medero
Philadelphia

Editor: Tom Medero mistakenly attributes "You could look it up" to Yogi Berra on page 12 of the January 2013 *Phactum*. Berra may have said it—I said it, just now, aloud, to myself—but he didn't originate it, nor is he the person most famous for saying it. "You Could Look It Up" was the title of a 1941 James Thurber story about a little person sent up to bat in a baseball game. The phrase was popularized by the baseball manager Casey Stengel, who in baseball is probably second only to Berra in memorable sayings.

No doubt inspired by the fictional story, in 1951 Bill Veeck (rhymes with "wreck"), the owner of the major league St. Louis Browns, signed a little person named Eddie Gaedel to a major league contract and Browns manager Zack Taylor sent him to the plate. Gaedel was 3 foot 7 inches tall and wore the uniform number 1/8. (He walked on four straight balls.)

Howard J. Wilk
Philadelphia

Editor: The story of immortality without strength and vitality goes back a lot further than Jonathan Swift (January 2013 *Phactum*, page 4). In Greek mythology, Tithonus was the mortal lover of Eos, goddess of the dawn. Eos asked Zeus to give Tithonus eternal life, and Zeus agreed. But she forgot to ask for eternal youth and so Tithonus eventually shriveled and shrank, his manly voice turning squeaky, until he became a grasshopper (details vary).

Woody Allen said, "I don't want to achieve immortality through my work...I want to achieve it through not dying". (You could look it up.)

Howard J. Wilk
Philadelphia

Editor: The fundamental question of science is not "WHAT IF?". You can what-if forever. The question is in the why of the very phenomenon you are considering, not it's what-iffyness. The problem has to exist in what is being observed, requiring a why, not a what-if, answer. There is no

"answer" to a what-if... because the what-iffer always has another what-if.

Thor Hyerdahl did not show anything about the possibility, or not, of Polynesians coming from the American continents. He posed a what-if-fantasy and demonstrated that balsa-wood boats made in the 20th century could be made to sail, with 20th century sailors and 20th century tools, over the Pacific Ocean. NOTHING about the possibility of Polynesians coming from the South American continent, and NOTHING about anyone going the other way, was proved: neither the reality nor the possibility was "proved".

Similarly, any Hollow Earth theory makes no sense without a problem generating the idea in the first place. The notion that continents might have moved was NOT posed as some infantile/fantastical what-iffism. The very contours of land masses and the need to explain similarities in plant and animal life, among other things, needed some, well, explaining.

Mitchell Brown
Philadelphia

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Various Ruminations

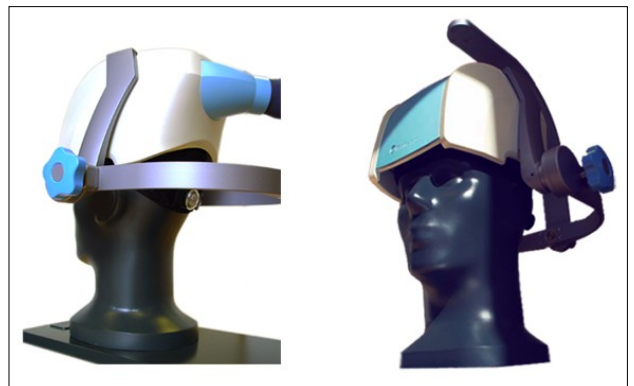
Collected/Written by Ray Haupt
(with help from others)

Transcranial Magnetic Stimulation

Get a load of this item from Salon.com:

http://www.salon.com/2013/01/10/a_magnetic_helmet_that_could_help_treat_depression/

It seems that an Israeli company has invented a new therapy, Transcranial Magnetic Stimulation (TMS), that treats depression. TMS is facilitated by a helmet containing magnets. In addition to depression this device is claimed to be useful in treatment of Parkinson's disease, bipolar disorder, schizophrenia, and PTSD. Additionally it is being tested to treat cocaine addiction, Tourette's syndrome, Alzheimer's, stroke rehabilitation, multiple sclerosis,



and ADHD.

The magnetic resonance fields are said to be about the same strength as those of magnetic resonance imaging machines. That is fine but why then does MRI cause no therapeutic changes?

Is it possible that we will soon be seeing teenage boys running around with strange headgear?

Darwin Day Resolution in Congress

In the NCSE weekly newsletter Evolution and Climate Change Education of January 25, 2013, Glenn Branch reports:

House Resolution 41, introduced in the United States House of Representatives on January 22, 2013, would, if passed, express the House's support of designating February 12, 2013, as Darwin Day, and its recognition of "Charles Darwin as a worthy symbol on which to celebrate the achievements of reason, science, and the advancement of human knowledge." Rush Holt (D-New Jersey), one of the few members of Congress with a Ph.D. in a scientific field, is the sole sponsor of the bill. After its introduction, H. Res. 41 was referred to the House Committee on Science, Space, and Technology.

That is great but the fly in the ointment happens to be that Congressman Holt is the only sponsor in a body of 435 legislators of what should be a benign bill honoring a great scientist. In 2011 a similar bill, HR 81, had been introduced by Congressman Peter Stark of California only to die in committee. HR 41 is likely to have the same fate.



**Joseph Leidy
(1823-1893)**

I wonder though, given the atmosphere of anti-Darwin sentiment among some segments of the population, is Darwin, despite his visionary contribution to science, the right scientist to commemorate by the American legislature given that he is hotly rejected and is not even an American?

So why not select someone else? Charles Darwin is not the only enlightened act in town. Perhaps that some-

one else could be a scientist from our town, Joseph Leidy, born in Philadelphia of German American parents in 1823. Joseph's father wanted him to apprentice as a sign maker but Joseph, encouraged by his stepmother, had other ideas and matriculated at University of Pennsylvania where he received his degree in medicine. Leidy was not very successful as a medical practitioner but he was very capable as a researcher. He was the first to analyze blood to solve a murder mystery when a Pennsylvania farmer was murdered. A bloody suspect claimed that the blood was from slaughtering chickens but Leidy's analysis under a microscope proved otherwise. In 1846 Leidy proved that *trichinosis* was caused by a para-

site in undercooked meat.

In 1846 Leidy became the Librarian of the Academy of Natural Sciences of Philadelphia, and in 1851 he became a Fellow of the College of Physicians of Philadelphia. Leidy became the first president of the American Association of Anatomists in 1888 and 1889. He was a member of more than fifty societies, including the American Philosophical Society and the College of Philadelphia, and the recipient of many medals and honors, including the medal of the Royal Microscopical Society and the Cuvier Medal from the Academy of Sciences in Paris.



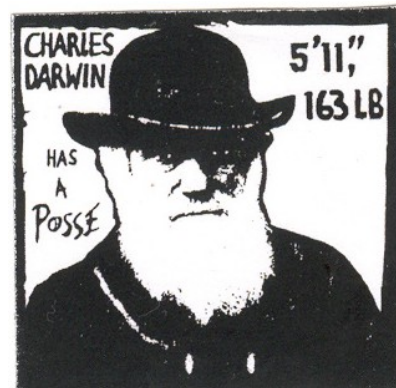
1858 picture of Joseph Leidy and hadrosaurus leg bone.

Leidy was Professor of Anatomy and Paleontology at University of Pennsylvania and Professor of Natural History at Swarthmore College. He made many discoveries of extinct creatures including the dire wolf. Leidy directed the reconstruction and eventual display at the Academy of Natural Sciences of Philadelphia a nearly complete fossilized skeleton of *Hadrosaurus foulkii* (duck-billed dinosaur), found in Haddonfield, NJ in 1858.

Meanwhile as Darwin was introducing the Theory of Evolution, Leidy was an early American supporter of that science theory. He actively promoted Darwin and lobbied successfully for Darwin's election to membership in the Academy of Natural Sciences of Philadelphia.

In 1885, after William Wagner's death, the Board of Trustees of the Wagner Free Institute of Science appointed Joseph Leidy to head the Institute's scientific and educational programs. Dr. Leidy expanded the Institute's mission and programs were greatly expanded.

Leidy's most lasting contribution to the Wagner was his reorganization of the Institute's museum. Wagner's original collections had been greatly enlarged by specimens collected in the field and through purchases and other acquisitions. Based on Darwinian principles of evolution, Leidy personally developed and supervised their reorganization into a systematic display in which specimens and cases were arranged so that visitors moved from simpler to more complex organisms and through geologic time as they walked through the exhibition. The museum displays at the Wagner remain just as they were arranged by Leidy in the 1880s.



So, with Darwin meeting resistance in Congress, why not

put forth Joseph Leidy as an icon of science and reason? No doubt a Leidy Appreciation Day would be rejected for the same poor reasons that Darwin Day is shunned by our political elites, but it might have some small degree of legislative success in Philadelphia and great appreciation at those places in Philadelphia where Charles Darwin and Joseph Leidy have a posse.

Voice Programmed Radionic Potentizer

It is good to know that homeopathic remedies can be easily prepared without the tedious labor of the traditional dilution/succession cycles. The Voice Programmed Remedy Maker, available for \$395, will cause a small bottle of tablets



to take on the characteristics of any homeopathic remedy potentized to any strength whatsoever.

To use this device a small jar of tablets is placed in the well, the button on the side of the Remedy Maker is depressed, and the operator will say the name of the potion desired followed by the potency. In a few seconds, *“Using Psychotronic Technology sound waves are used to modulate free undifferentiated energy within the microphone resonator, and these weak subtle vibrations are then fed to a second resonator for amplification, before being passed through circuitry to make the remedy.”* No need to formulate Mother Tinctures or maintain elaborate potentizing facilities.

This advanced technology device facilitates *“Remote Copying: Although the device is not fitted with a Copy well the special nature of the device makes Copying possible using a recorded Energy Programme. For example, place a bottle of the tablets you want to copy in your left hand and simultaneously record this program: “I copy the vibrations of the tablets I hold in my left hand”. Then place the tablets you want to potentise in the well of the device (or your finger) and transfer the remedy by operating the Make switch.”* Presto!! A new bottle of any homeo-

pathic remedy has been created.

A fascinating feature is that the Voice Programmed Remedy Maker *“will accept information in any presently used language”*.

This marvel of science and modern homeopathy can be found at: <http://www.remedydevices.com/voice.htm>

Intelligent Design and State Legislatures

Meanwhile, as Darwin Day stalls in the Congress, Professor P. Z. Myers, at his Pharangula internet site, has an interesting article addressing the Missouri state legislature as it deals with teaching scientific biological evolution.

<http://freethoughtblogs.com/pharyngula/2013/02/01/whoa-missouriyoure-not-going-to-let-this-one-pass-are-you/>

Myers points out this curious passage in Missouri House Bill 291:

“If biological intelligent design is taught, any proposed identity of the intelligence responsible for earth’s biology shall be verifiable by present-day observation or experimentation and teachers shall not question, survey, or otherwise influence student belief in a nonverifiable identity within a science course;”

The entire text of that bill may be found here:

<http://www.house.mo.gov/billtracking/bills131/biltxt/intro/HB0291I.htm>

Do not feel intellectually inadequate if the above passage makes no sense to you. It doesn’t and Professor Myers seems equally baffled.

The Evolution vs Creation warring views of origins is unfortunately not confined to Missouri. Legislation has been proposed in several state legislatures addressing the matters of science education, most particularly science that addresses life origins. The general refrain in most of those legislative efforts is that if Biological Evolution is taught then equal instruction time in class and equal space in text books must be allocated to discuss weaknesses in the Theory of Evolution and to expose students to other theories of life beginnings.

There recently seems to be less overt insistence among state legislators that Intelligent Design be taught as an alternative theory of life in general and most specifically Human Life. Instead the stated desire, although not likely the real desire, is to “encourage critical thinking regarding controversial scientific theories.” Yeah. That’s what they want.

This general topic of legislators meddling in the science classroom is frequently addressed in the National Center for Science Education weekly newsletter edited by Glen Branch, NCSE Deputy Director. The newsletter is distributed on line, is free, and should be of interest to skeptics. The NCSE website is <http://>

MCHUMOR.COM by T. McCracken



“Dad, will you tell me about evolution, how we evolved from cabbage leaves to storks to people?”

ncse.com

To subscribe to NCSE's free weekly e-newsletter:

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

Witchcraft is alive and well

The Telegraph reports that a woman in Papua New Guinea was burned to death by villagers on the grounds that she used sorcery to cause the death of a 6 year old boy. Police were present but were outnumbered and unable to halt the lynch mob.

The article states: *"There is a widespread belief in sorcery in the poverty-stricken Pacific nation where many people do not accept natural causes as an explanation for misfortune, illness, accidents or death.*

In 1971, the country introduced a Sorcery Act to criminalise the practice. But PNG's law reform commission recently proposed to repeal it after a rise in attacks on people thought to practise black magic.

Local bishop David Piso said many innocent people had been killed. "Sorcery and sorcery-related killings are growing and the government needs to come up with a law to stop such practice," Piso said."

Witch burning is unfortunately not a relic of the Middle Ages, it is alive and well in some parts of the world, and is likely to be practiced for many years into the future.

In New Guinea the practice of faith healing (white magic) is common and tolerated while sorcery (black

magic) is harshly punished by lynch mobs. In India charges of witchcraft are common, generally against women, and often there is some financial consideration such as land or inheritance as motive for the accusations.

Action against alleged witches fomented by a rabble is bad enough, but when enshrined into law by the state it is even worse. In Saudi Arabia witchcraft or sorcery is a criminal offense. It was reported that 118 persons had been arrested in the province of Makkah that year for practicing magic. and "using the Book of Allah in a derogatory manner", 74% of them being female. According to Human Rights Watch in 2009, prosecutions for witchcraft and sorcery are proliferating and "Saudi courts are sanctioning a literal witch hunt by the religious police."

In Africa accusations of sorcery are common in Cameroon, Congo, Kenya, and Tanzania. Witch-hunts in Africa are often led by relatives seeking the property of the accused victim. Amongst the Bantu tribes of Southern Africa, the witch smellers were responsible for detecting witches. In parts of Southern Africa several hundred people have been killed in witch hunts since 1990.

<http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/papuanewguinea/9854526/Sorceress-burned-alive-in-Papua-New-Guinea.html>

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Along with being the current PhACT president Bob Glickman is also assistant curator of the Museum of Scientifically Proven Supernatural and Paranormal Phenomena. Already having a full-time job and working at a busy imaginary museum takes up a lot of time but he is willing to discuss some of the exhibits and research featured there. You can look forward to the Hall of Bigfoot Nesting Sites and Body Parts, the Curio of Homeopathic Cures, the Unicorn petting facility and many others.

Bob will be PhACT's speaker on March 16, 2013. See you there!!

The Museum lives at www.facebook.com/emptymuseum

Meeting Report - January 2013

Media Myths: A lecture by Professor W. Joseph Campbell

By Mark Meyer

Mark Meyer is a physics student of Dr. David Cattell at Community College of Philadelphia

The talk began with Campbell describing how the media has their own set of legends and mythology that have influenced how the public views them. He explained that many of these myths were perpetuated largely by the media themselves. He then went on into greater detail on 3 examples.

The War of the Worlds was a novel by H.G. Wells that described an invasion by Martians. On Oct 30 1938, Orson Welles broadcast an adaptation of the book on *Mercury Theatre on the Air* from 8-9 PM. It was done in the style of news reports coming in, and he moved the setting to New Jersey, so that it seemed more like a report on an actual attack.

The day after the broadcast aired, newspaper headlines stated that panic and hysteria had gripped the nation, causing unknown amounts of damage. Campbell explained that the papers never really backed up their claims, just shared a few anecdotes. No fallout from the event was reported over the next few days, and there would have been if that much panic had really existed. He also believes that anyone listening would have quickly realized the nature of the program, either by checking other channels or looking up what was supposed to be on at that time.

Campbell concluded that there really never was that much panic, just a few isolated incidents. He claims that the newspapers basically made it up out of whole cloth for a few different reasons. At the time, newspapers were very reliant on wire service roundups, with no way of checking what was reported by them, meaning that when a few stories were reported by the wire services, their perceived relevance ballooned. The newspapers were also dealing with the birth of a new medium, and both were competing for the same audience, so bashing radio was in the newspapers' interests.

His second example was of the Cronkite moment; an incident which came in 1968 after Walter Cronkite came back from Vietnam and gave a pessimistic report that ended with the claim that Vietnam was 'mired in stalemate.' According to the story President Lyndon B. Johnson was watching in the White House and said, "If I've lost Cronkite, I've lost middle America."

Campbell believes that this never happened and had many reasons why. The phrase has many different versions, and that's unlikely with a president, since their words tend to be well recorded. At the time, 'middle America' was not really in the public lexicon and wouldn't be for many more years, around the time the story first showed up. During the report LBJ was not at the White House, he was at a birthday party, giving a speech. Finally, Cronkite's statement was pretty typical at the time, so Campbell questions why LBJ would consider it important, especially since even Cronkite has said he did not think his role was very important.

Campbell's final example was of the Watergate scandal, specifically the perception that two reporters, Bob Woodward and Carl Bernstein, took down the President Nixon. He explained a couple of the factors that led to this perception. At the height of the scandal, Woodward and Bernstein released a book called *All the President's Men* about their role in the investigation. A few years later, a movie version came out just as the wounds were beginning to heal and solidified the story as being about the two reporters. Additionally, the secret behind Deep Throat kept the public talking about the reporters much longer than it would have otherwise.

According to Campbell, the problem with this perception is that it ignores all of the other people and events involved. Many different agencies and people were all a part of it, and the contributions of the reporters pale in comparison. In particular, one of

the largest factors in Nixon's fall was the incriminating tapes he kept, and which the reporters declined to look into. Campbell backs this argument up with a quote from Woodward, "To say the press brought down Nixon, that's horseshit."

Campbell then gave three reasons why he thought it was important to debunk these myths and legends. First, that getting it right is important, that the truth should be given respect. Second, that it's important to know the line between fact and fiction. Finally, that debunking these myths puts them in a more coherent context, showing that media power is subtle, and not that overt.

The talk concluded with Campbell explaining why media myths have power. These stories make history simple and accessible, so that people can make sense of the past. They also make the media seem powerful and knowing, and people find it reassuring to believe that there is someone out there that knows what is going on and can do something about it. They also are given a cinematic treatment, becoming more streamlined with details dropped, making them more digestible.

Editors note: See next page for description of several books by Dr. Campbell

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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>

Reading the Landscape of Philadelphia, Professor David Hewitt.

6 Mondays, March 25 - April 29, 2013, 6:30 - 7:30 PM. At 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. At 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.

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

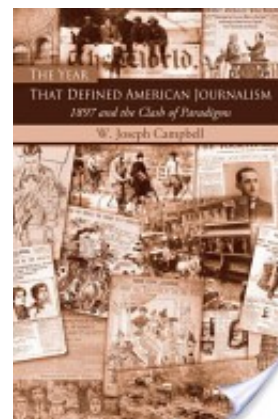
Did the Washington Post bring down Richard Nixon by reporting on the Watergate scandal? Did a cryptic remark by Walter Cronkite effectively end the Vietnam War? Did William Randolph Hearst vow to "furnish the war" in the 1898 conflict with Spain? In *Getting It Wrong*, W. Joseph Campbell addresses and 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

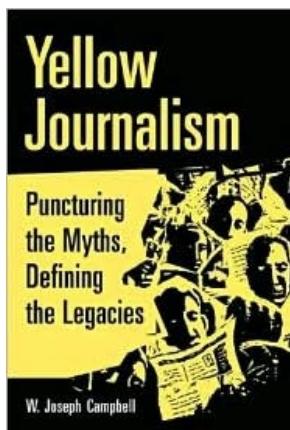
The Year that Defined American Journalism explores the succession of remarkable and decisive moments in American journalism during 1897 – a year of significant transition that helped redefine the profession and shape its modern contours. This defining year featured a momentous clash of paradigms pitting 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.

The Year That Defined American Journalism introduces the year-study methodology to mass communications research and enriches our understanding of a pivotal moment in media history.



Yellow Journalism: Puncturing the Myths, Defining the Legacies

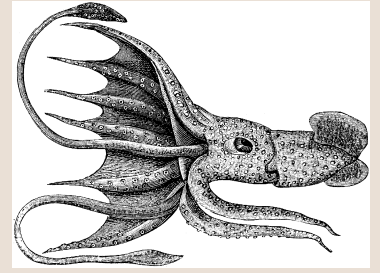
Publisher: Praeger (March 30, 2003)
ISBN-10: 0275981134 ISBN-13: 978-0275981136 Paperback: 240 pages



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.

The Norwegian Kraken and the Androsian Lusca

By Don Nigrone



In *The Natural History of Norway, Part II* (1755), Bishop Erich Pontoppidan described the Kraken as “round, flat, and full of arms, or branches.” He continued:

... which seems to be in appearance about an English mile and an half in circumference, (some say more, but I chuse the least for greater certainty) looks at first like a number of small islands, surrounded with something that floats and fluctuates like sea-weeds... It seems these are the creature’s arms, and, it is said, if they were to lay hold of the largest man of war, they would pull it down to the bottom. After this monster has been on the surface of the water a short time, it begins slowly to sink again, and then the danger is as great as before, because the motion of his sinking causes such a swell in the sea, and such an eddy or whirlpool, that it draws every thing down with it...

And he wrote that “this Krake must be of the Polypus kind”. By polypus he simply meant some kind of cephalopod like an octopus or a squid.

The giant squid was not scientifically named until 1857 by Japetus Steenstrup. Richard Ellis in *The Search for the Giant Squid* (1998) wrote that they were “appearing all over the beaches and shallows of Newfoundland from 1871 to 1881.”

Henry Lee in *Sea Monsters Unmasked* (1883) wrote that with the discovery of the giant squid we now knew the real basis for the legend of the Kraken. He noted that the good bishop’s hunch had been spot-on and declared “this vexed question of marine zoology set at rest for ever.” And Bernard Heuvelmans concurred by stating in his chapter *The Kraken and the Giant Squid* which appeared in his book *In the Wake of the Sea-Serpents* (1968) that the “story of the legend of that many-armed sea monster, the *kraken*, and its gradual revelation as the fact of the giant squid”. Today it is widely accepted that a real sea creature lay behind the legend of the Kraken and that that beast is none other than the giant squid.

But before letting this matter rest peacefully forever, let us first examine another sea monster with many arms that also drags ships and people down into the depths of the sea, namely, the Lusca of Andros in the Bahamas. Below are two passages



Detail of a copy from the *Carta Marina* of 1539 by Olaus Magnus. Note the ship being sucked into the Moskstraumen off the Lofoten Islands.

from *Mutants & Monsters* (2008) by Oliver Ho concerning the legend of the Lusca:

In the Bahamas, near the island of Andros, there lives a creature called the Lusca. Although it's rarely seen, witnesses describe it as a gigantic octopus (some even say it's half-octopus, half-shark) anywhere from 75 to 200 feet long! The Lusca live in underwater caves often called "blue holes," ...

Now the world knows giant squid exist for real, and the legends of the Lusca and Kraken have come to life.

However, in a syndicated article which appeared in the *Kokomo Tribune*, Kokomo, Indiana on April 20, 2008 entitled *Hiking in the Bahamas: Androsian beasts and blue holes*, Amy C. Balfour wrote of the blue holes that:

Powerful tides rush through some of the tunnels below them and can, on rare occasions, twist into whirlpools capable of sucking 14-foot boats underwater. This phenomenon most likely gave life to another Androsian beast, the Lusca.

And in *10 Magnificent Maelstroms* by Angie in *Nature & Ecosystems* (<http://webcoist.momtastic.com/2009/07/24/10-magnificent-maelstroms-and-destructive-whirlpools/>) we learn that the two most powerful ones are off Norway. Below are some extracts from that article:

The Maelstrom of Saltstraumen is located next to Norway. Positioned near the Arctic Circle, the mightiest maelstrom in the world creates the strongest tidal currents on the globe.

While the Saltstraumen is the strongest maelstrom, the Moskstraumen is the most famous. Perhaps infamous thanks to Edgar Allan Poe and Jules Verne. Poe penned a story called *A Descent into the Maelstrom* and then Verne referred to it at the culmination of the book *20,000 Leagues Under the Sea*. Herman Melville wrote about it through his character Captain Ahab in *Moby-Dick*. Moskstraumen is thought to be the first mentioned maelstrom in history.

Located off the Lofoten islands, Moskstraumen is the second strongest whirlpool in the world.

Sharks can pull someone underwater and octopuses have arms that can grab onto people. Nonetheless, we need not search for some real beast to try to explain the legendary Lusca for the vortex itself was the phenomenon that was seen and the fabulous creature totally imagined in order to explain the vortex. Likewise, we should not rely on the giant squid as the explanation for the Kraken for the maelstrom itself was what was observed and the imaginary monster was simply created in order to account for the enormous whirlpool. The true explanation for the terrifying maelstroms off Norway lay not in any disturbance caused by some sea creature, whether the legendary Kraken or a real giant squid, but in the spectacular fluid dynamics of the area.

Don Nigroni received a BS in economics in 1971 from St. Joseph's University and a MA in philosophy from Notre Dame in 1973. He retired in 2007 after working for 32 years as an economist with the US Bureau of Labor Statistics. He now spends much more time hiking, mountain biking, kayaking and bird watching.

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Monsters

“What would an ocean be without a monster lurking in the dark? It would be like sleep without dreams.”

~ Werner Herzog, (b. 1942), German film director

“Oh, Creator! Can monsters exist in the sight of him who alone knows how they were invented, how they invented themselves, and how they might not have invented themselves?”

~ Charles Baudelaire, (1821-1867), French poet, translator, and literary and art critic

“Fantasy, abandoned by reason, produces impossible monsters; united with it, she is the mother of the arts and the origin of marvels.”

~ Francisco de Goya, (1746-1828), Spanish romantic painter and printmaker

The Controversy Over Domestic Drones

by Paul Schlueter III



As a kid, I long dreamed of someday becoming a pilot, and flying planes around in the sky for my living. Not being particularly wealthy, and having very little aptitude at the time for the study of Math, my dream never got much further than flying those tethered, gas-engined model planes, some moderate model rocketry, and building a bunch of horribly un-aerodynamic glider designs of my own (though I understood airfoil lift concepts from early on, I never had the patience to actually BUILD airfoil wings from balsa - my gliders all had flat, balsa-framed, paper-coated wings.) A little later in adolescence, my late step-grandfather showed me his advanced hobbyist radio-controlled model planes (also gas-engined, but far more sophisticated than my toys from earlier years). They were plenty cool to look at, but I never saw him fly any of them.

Today, all you need do is turn on the TV, and you'll see ads for electric-powered model helicopters of various sizes, most of which are remote controlled. Some of them are sufficiently large and powerful that they could be modified (by a fairly skilled electronics tech) to carry a simple, compact surveillance camera aloft.

Step up to military grade, and recognize that we now live in a world FILLED with all sizes and types of military remote controlled aircraft ("drones," because they are unmanned). Unmanned Aerial Vehicles (UAVs) have risen to crucial prominence in matters of military surveillance, terrorist tracking, and even covert kill operations. The larger models, some of which are jet powered, can carry amazing payloads of cameras and/or weaponry, can remain aloft for days or even weeks (as in the case of some solar-powered units), and may be operated via satellite from half a world away. Not

everyone agrees with the use of drones to carry out military operations, but the day is here, and in typical military form, we are told we must maintain the cutting edge of the technology to stay ahead of our foreign enemies (who are sure to develop their own drone forces as soon as practical.)

Also in typical form, military technology has now been turned to domestic uses. In some cases the exact same base model drones are used by civilian authorities in U.S. airspace, patrolling our nation's borders, seeking out illegal traffickers in immigrants and/or drugs, locating domestic fields of illicit cannabis, searching for lost backpackers in our wilderness, and patrolling for forest fires. Police have even begun using UAVs in some American municipalities, observing civilian activities for reasons ranging from terrorist surveillance at home, to issuing traffic citations to speeding motorists. It is such domestic use that annoys and upsets some of our citizens,

who object to what they consider to be a mechanized violation of their own civil rights.

Of course, where the cops go, the cons are sure to follow (or is it vice versa?) Drug traffickers, in particular, have huge incomes to spend on developing new technologies, and it's only a matter of time before we'll start hearing about smuggling UAVs that crash somewhere, or are otherwise discovered by officials. Prison rumors already suppose the use of UAVs to observe inmates in prison yards; they could just as easily be used to drop contraband INTO prison yards, at the direction of outside conspirators. If police can use shoe-



A simplified 4 blades Camera Helicopter. This device is battery operated and can operate for about 10 minutes carrying an 8.5 pound payload, in this case a 35 mm camera. This model is rather pricy at about \$17,500 but less ambitious model helicopters can easily be purchased at hobby shops for as little as \$50.00.

box-sized drones to surveil the local drug kingpin's activities, what is to stop the kingpin from using something similar to watch for the S.W.A.T. team's arrival? In time, it is inevitable that corruptible individuals and/or disgruntled former employees will disseminate technical knowledge and practical skill back and forth across the lines of civil disobedience, much as spies swap military information.

In their June 15, 2012, issue, the Week published a full-page "Briefing" on "The drone over your backyard." They bluntly state that Predators (yes, the military model UAV) "have been patrolling U.S. borders since 2005." Police departments in Florida, Maryland, Texas, and Colorado admit that they are testing drones for domestic uses. In May, Congress asked the FAA to relax rules for deploying domestic drones; police may now fly drones up to 25 lbs. in weight, as long as they remain in direct sight of their operator and don't fly above 400 feet (twice as high as the tallest allowed Ham radio antenna tower). By 2020, the FAA expects that there will be 30,000 UAVs in American airspace --and that's only counting the licensed ones!

Police UAVs start for as little as \$300, and can quickly rise to the \$50K price range, but even at the price of a Cadillac, a police drone is still much cheaper than a manned helicopter which costs around \$1 million. The industry is expected to reach some \$12 billion dollars by 2020, and even now 69 companies are marketing at least 146 models for Police use. Models range in size from the Predator (66 ft. wingspan) to the Qube (it fits in a car trunk), to the hand-launched military Raven. AeroVironment markets a "hummingbird drone" said to be "palm-sized," weighing less than a AA battery and carrying a video camera. "It's capable of flying 11 miles per hour and landing on a window ledge, where it can, record sound and video." UAVs are capable of remote control and/or preprogrammed flight path autonomy.

Remember the movie "Blue Thunder," in which Roy Scheider played a helicopter cop? His chopper had "stealth mode," a whisper-quiet operational mode that allowed Scheider to sneak up on a residential window and peep at the woman inside without her hearing it. It was admittedly fiction, but if you were to give a nerdy local cop the ability to prowl silently through YOUR neighborhood with UAV surveillance, how long do you think it would take for him to start poking his camera where it shouldn't be? Most people wouldn't even want the police watching their families at the backyard poolside, which kids do with helium balloons even

now.

Still, the Week says, "in separate cases in 1986 and 1989, the Supreme Court ruled that police don't need a warrant to observe a private property from a public airspace." In most communities, the air over streets and alleys is public, and with a UAV a few hundred feet up in the air, the typical yard (or even home, via poorly-curtained windows) is open for inspection at any time. Some people proudly assert that they

aren't doing anything illegal, so what's wrong with being watched? If that's the standard, why have curtains (or walls) at all? Why not live our lives in wide open, total nudity at all hours of the day and night? Until your life has been examined in the cold and blunt manner of police observation, it's hard to realize how little such peering differs from a criminal burglary; either way, you're being invaded in an unwelcome manner, over which you have no control!

Of course, that's all assuming that you KNOW

you're being watched. How often do you look up at airplanes you hear overhead? Depending on various factors, often you can't spot a plane you can easily hear. What if you can't hear it? Do you routinely scan the skies (perhaps watching for UFOs)? Could you distinguish the contrail of a commercial airliner from one made by a much lower UAV? (Don't fool yourself into believing that the 400-foot operational ceiling will last for long!) Gas-powered model planes are quite noisy, but how much noise will an electric drone make?

What's to stop one from "perching" in a tree, saving on energy and extending its operational time? What IS that thing on that rooftop over there?

In its June 28 issue, the Week reported on a survey of public attitudes about domestic drone use. 67% of Americans think it's OK to use one "to track down criminals," but the same percentage oppose their use to ticket speeders on the highway (a perfect example of how most people don't acknowledge that anything THEY DO PERSONALLY is "criminal"). 64% fear drones with high-tech cameras will invade their privacy.

Officials aren't the only ones tinkering with drones. Hobbyists are nearly unregulated in this area, limited primarily by their wallets and their ingenuity. DIYDrones.com is a website for amateur drone fans, created by Chris Anderson, Editor-in-Chief of Wired magazine, and a committed drone enthusiast; there are over 25K members there alone. With readily-available chips and sensors, relays and actuators, a clever home builder can cobble together nearly anything he can create on modern design software. Smart phones offer



A remote controlled model B-29 Superfortress bomber. The wing span of this model of the World War 2 icon is 42 inches and flight time using batteries is about 6 minutes. This model is easily available in hobby shops for about 100 dollars.

convenient, discrete control platforms. Maybe it's all in good fun for people you know personally, but how much trust are you willing to grant to the guy who keeps suspiciously to himself, only seen carrying plain brown packages to and from his "stalker-van?" What exactly does he plan to do with those contraptions your kids say he builds in his basement? Does it matter if his wife always wears a burkha?

Police drones are not armed with missiles, says the Week article. But how long do you really think it will be before they begin to carry a laser-sighted rifle, "just to protect victims under attack when a foot patrol Officer cannot reach them in time?" Sooner or later, hobbyist builders will mount paintball cannons on private UAVs for "dogfights;" when will the paranoid drug dealer on the corner install a black-market Glock in his, to protect himself from the competition, or from the Police? How difficult will it be to track the controller of a radio-controlled UAV that opens fire in the local football stadium on game night, and later to identify him in Court? What if the signal was traced to originate in your backyard toolshed; could you disprove complicity in such an event?

There's a lot that can go stupendously wrong, where radio-controlled UAVs are concerned. Whether under official or private control, such devices are inherently difficult to subject to responsible civil oversight. Their stealth and remote control makes them most appealing to the very sort of person seeking some covert way to exploit, bully, or snoop on others with impunity. The more ubiquitous they become, the more ways people will invent to misuse them, no matter how much value they have in trustworthy hands. No matter how splendiferous the pros may prove to be, we must also be alert and vigilant to their cons.

Editor's notes:

1.) The Washington Post reported on September 28, 2011 that a Massachusetts man has been accused by federal authorities of plotting to attack the Pentagon and the Capitol Building using remote controlled model aircraft laden with C-4 explosives.

http://www.washingtonpost.com/national/national-security/mass-man-accused-of-plotting-to-hit-pentagon-and-capitol-with-drone-aircraft/2011/09/28/gIQAWdpk5K_print.html

2.) Miami Herald, Monday, August 6, 2012. The topic of aerial drones is discussed as a tool to be used by authorities to help thwart drug smuggling along the Mexican border. Civil liberties aspects of that surveillance approach are discussed. The same article speculates that the Mexican drug cartels may already be using drones for their own data gathering and intelligence purposes.

<http://www.miamiherald.com/2012/08/06/2930381/the-emerging-drone-culture.html>

3.) New Jersey meth smugglers attempted to steal military drone parts:

<http://www.wired.com/dangerroom/2012/04/meth-smugglers-secret-drone/>

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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Spanish Police Foil Remote-Controlled Zeppelin Jailbreak

Innovative associates of a jailed drug trafficker in the Canary Islands were foiled by Spanish authorities. They planned to use a 13 foot model zeppelin laden with climbing gear to free their friend.

See: <http://gizmodo.com/5307943/spanish-police-foil-remote+controlled-zeppelin-jailbreak>



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, 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 - PhACT President Bob Glickman will lead discussion about **the Museum of Scientifically Proven Supernatural and Paranormal Phenomena.** See page 8.

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 Expedition to the Heinz NWR

On Saturday, May 18, 2013, you are invited to join PhACT for an expedition to the John Heinz National Wildlife Refuge at Tinicum where we will look for the Ape Boy of the Chester Swamps, a half-ape, half-human creature with thick reddish fur, something like a local Bigfoot, who is said to be lurking somewhere in the refuge. Our guide will be Don Nigrone who has hiked, biked and kayaked there for many years and is a volunteer Weed Warrior at Heinz. We will meet at the Visitor Center at 10:00 AM and will be hiking 3.3 miles around the impoundment. We may not find the Ape Boy but we will learn about the rich history and natural history of this urban wildlife refuge. Bring insect repellent, sturdy shoes, lunch, binoculars and a camera. The event is free. 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 phactpublicity@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 an extensive 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>

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.

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

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.



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 PM 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/>

The next Nerd Nites are 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

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

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 era.

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.thelaurehillcemetery.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 accidentally 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.

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!

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://scienceontaphilly.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

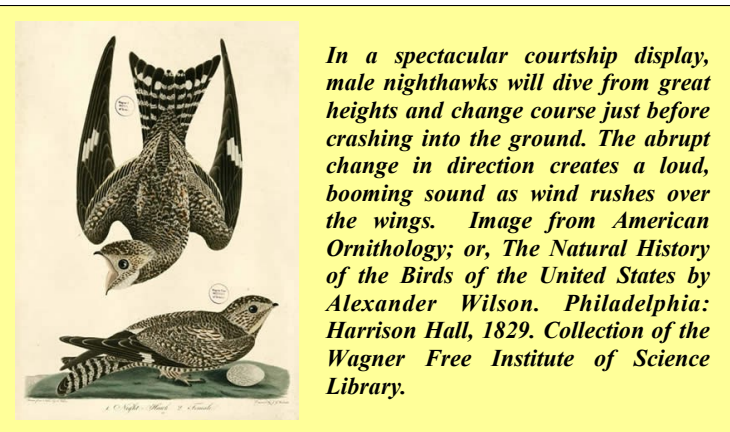
In a spectacular courtship display, male nighthawks will dive from great heights and change course just before crashing into the ground. The abrupt change in direction creates a loud, booming sound as wind rushes over the wings. Image from *American Ornithology*; or, *The Natural History of the Birds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

"pOrnithology": 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



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.

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.

The Academy of Natural Sciences of Drexel University
Free and open to the Public.

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.

Wednesday, February 13, 2013 at 7:15 PM at the Franklin Institute, 20th and Benjamin Franklin Parkway.

Rittenhouse Astronomical Society event.

Free and open to the public.

See: <http://www.rittenhouseastronomicalsociety.org/>

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

See page 1 for more details

Tuesday, February 19, 2013 at 12:00 to 1:00 PM 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.

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.

The Delaware Valley Amateur Astronomers

is a group of enthusiastic hobbyists who live in and around Philadelphia. The DVAA's monthly meetings are free and the public is invited to attend. Meetings always feature a short talk on "what's up" in the sky currently, as well as a talk by a professional astronomer or members of the DVAA or a neighboring club.

Unless otherwise announced, monthly meetings will be held on the third Friday of each month at the Freedom Hall, in the Upper Merion Township Building, 175 W. Valley Forge Road, King of Prussia, PA 19406

Meetings start at 7:00 with time for informal socializing. Announcements and the main talk begin at 7:30 sharp. Refreshments are provided. Upcoming club events are listed on the DVAA website: <http://dvaa.org>

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.thelaurelhillemetery.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 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.

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/#>

Tuesday, February 26, 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 Fourteenth Jonathan E. Rhoads Commemorative Lecture

Honoree: Anne Schuchat, M.D., Acting Director, Center for Global Health, Centers for Disease Control and Prevention, Rear Admiral, US Public Health Service.

The Jonathan E. Rhoads Commemorative Lecture was established in 1996 to honor the man who made significant contributions to medicine and to the three institutions sponsoring this program. Dr. Rhoads served as President of the American Philosophical Society and The College of Physicians of Philadelphia, and as Chair of the Department of Surgery of the University of Pennsylvania. He was known to many as a true renaissance man in the image of Benjamin Franklin. This endowed program was made possible with generous support from the Benjamin and Mary Siddons Measey Foundation, The General Motors Foundation, and the many friends and colleagues of Dr. Rhoads.

Co-sponsored with the American Philosophical Society and the Department of Surgery, University of Pennsylvania.

Free and open to the public.

To register: <http://www.eventbrite.com/event/5141450216#>



Wednesday February 27, 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/>

Daniel N. Rolph, PhD, Head of Reference Services at the Historical Society of Pennsylvania and Montgomery County College, will speak on "My Brother's Keeper - Acts of Mercy During the American Revolution"

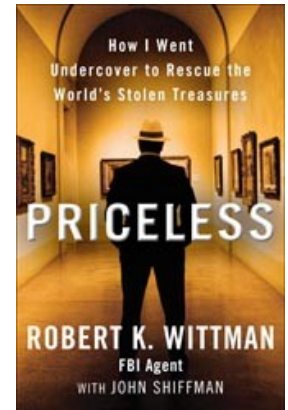
Wednesday, February 27, 2013 at 6:00 PM at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

<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-robbled 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.



Thursday, February 28, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103

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

Peter Edelman | So Rich, So Poor: Why It's So Hard to End Poverty in America

Anti-poverty advocate Peter Edelman is a Professor of Law at Georgetown University and the Faculty Director at the Center on Poverty, Inequality, and Public Policy. His first book, Searching for America's Heart: RFK and the Renewal of Hope chronicled the vision for economic justice he shared with Senator Robert F. Kennedy, to whom Edelman once served as a top aide. Previously the Director of the New York State Division for Youth and Vice President of the University of Massachusetts, he has written a number of articles on constitutional law, youth, and the pervading problem of poverty. The coauthor of Reconnecting Disadvantaged Young Men, he serves as chair of several boards, including the Public Welfare Foundation. So Rich, So Poor expertly delves into the continuing crisis of economic injustice.

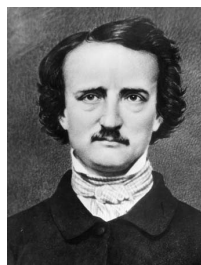
FREE. No tickets required. For Info: 215-567-4341.

Sunday, March 3, 2013 at 1:00 PM at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurelhillemetery.org>

LITERARY LAUREL HILL

The novelist who wrote America's first adult western, the explorer who described a harrowing winter in the arctic, the mad poet who shared his absinthe with Edgar Allan Poe, and the woman who wrote "Mary Had a Little Lamb"... These are among the novelists, poets and editors who lie in Laurel Hill Cemetery. Their graves will be visited; their careers and contributions will be recalled; and excerpts from their works will be read during this





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/

inspiring walking tour of Laurel Hill Cemetery. We will visit their graves, recall their careers, and read extracts from their works.

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; \$10/students and seniors; \$9/members. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online.

Guide: Michael Brooks, Ph.D.

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

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

Kim Hanley, Re-enactor, historian, motivational speaker) shares her first-person interpretation on **Abigail Adams: Founding Mother, Patriot, Wife and Political Advisor.**

A conversation with "Dear Abigail," an astute wife and mother, guaranteed to provide insight into the concerns of 18th century Americans, as well as those of the 21st century.

For directions visit: <http://wmchapel.org/contact-us/>

Free and open to the public.

Wednesday, March 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/>

The next Nerd Nite is Wednesday, April 3, 2013.

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

<http://delcoscience.org>

Spring Interactions of the Birds, Bees, and Other Players in the Environmental Web

A lecture by Tom Reeves, "Fellow" in the Delaware Valley Ornithology Club

Lectures are FREE and presented upstairs in the Lecture Hall.

Doors open by 7:30 PM. Lectures begin at 8 PM.

Thursday, March 14, 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

Observing Dogs

An Illustrated Lecture by ALEXANDRA HOROWITZ

Have you ever wanted to know what your dog was thinking? Why do dogs do what they do and how do they perceive the world? Given that dogs live in an estimated 75 million U.S. households, it is not surprising that we understand dogs by anthropomorphizing their behavior, but a wave of recent studies have given us new, and sometimes surprising, insights

into the cognitive abilities and behaviors of man's best friend. Dr. Alexandra Horowitz will discuss the latest discoveries in this field and her lab's approach to studying the dog using observational and simple experimental practices that provide a new understanding of the dog's point of view. Join us to peek inside your dog's mind.

Dr. Alexandra Horowitz teaches animal behavior, psychology, and canine cognition at Barnard College at Columbia University. The Horowitz Dog Cognition Lab, in New York City, is currently studying dog and human play. She is author of the best-selling "Inside of a Dog: What Dogs See, Smell, and Know," and her new book, "On Looking," was published in January 2013.

Free and open to the Public.

Saturday, March 16, 2013 at 9:30 AM to 2:30 PM at the 1696 Thomas Massey House in Broomall, PA

Historian Clarissa Dillon, PhD

Hands-on Cooking Workshop: Preparing a late winter/early spring meal in the 18th Century manner with seasonal foods.

For information and to register, call Clarissa Dillon (610)642-4269
Registration limited; COST: \$35.00

PhACT Event

Saturday, March 16, 2013 at 2:00 PM

PhACT President Bob Glickman will lead discussion about **The Museum of Scientifically Proven Supernatural and Paranormal Phenomena.**

See page 8.

Sunday, March 17, 2013 at 12:00-3:00 at Fort Mifflin, Philadelphia.

Display and demonstration: **"Still Working"** at Fort Mifflin in connection with a symposium **"Soldiers' Fare"**

Sunday, March 17, 2013 at 1:00 PM at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

ST. PATRICK'S DAY TOUR, TOASTS and TASTES

You don't have to be Irish to be part of this festive St. Patrick's Day tour and reception at Philadelphia's most similarly festive cemetery. 'Tis a merry occasion to be enjoyed by all! Though their gift of gab may have been silenced with the grave, Laurel Hill's proud Irish souls have left legacies to learn from and about.

Join us for this early springtime walking tour, held in the "spirit" of St. Patrick's Day, while we remember the heritage, struggles and accomplishments of our Irish and Irish American residents. Of course, no St. Patrick's Day would be complete without beer, food and music. Sample all at the after-tour reception in Laurel Hill's historic Gatehouse.

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; \$18/students and seniors; \$17/members. Advance registration is requested. Tickets should be purchased in advance by phone (215) 228-8200 or online. Guides: Bill Doran and Jerry McCormick



Monday, March 18, 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.

"Neurotheology." Andrew Newberg, M.D., Director of Research at

the Myrna Brind Center for Integrative Medicine at Thomas Jefferson University Hospital and Medical College and Adjunct Assistant Professor in the Department of Religious Studies at the University of Pennsylvania, is Board-certified in Internal Medicine and Nuclear Medicine. He is considered a pioneer in the neuroscientific study of religious and spiritual experiences, a field frequently referred to as neurotheology that attempts to better understand the nature of religious and spiritual practices and experiences. His latest book, *Principles of Neurotheology*, reviews the important principles and foundations of neurotheology, a field that has implications for the study of the mind, brain, consciousness, morality, theology, and philosophy. His research has included brain scans of people in prayer, meditation, rituals, and various trance states, surveys of people's spiritual experiences and attitudes, and the evaluation of the relationship between religious and spiritual phenomena and health. This includes a recent study on the effect of meditation on memory. Dr. Newberg has published over 150 research articles, essays and book chapters, and is the co-author of the bestselling books, *Why God Won't Go Away: Brain Science and the Biology of Belief*, and *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist*. Open to the public. For those who are able to contribute to our efforts, a Free Will Donation is requested.

Monday, March 18, 2013 at 7:30PM at the Free Library of Philadelphia, 1901 Vine Street, 19103
<http://libwww.freelibrary.org/authorevents/>
 215-686-5322

Ben Yagoda | How To Not Write Bad: The Most Common Writing Problems and the Best Ways to Avoid Them

University of Delaware journalism professor Ben Yagoda has written about language and writing for such publications as the *New York Times Book Review*, *Rolling Stone*, and *Esquire*. His books include *Memoir: A History*; *When You Catch an Adjective, Kill It*; and *The Sound on the Page*, "a stylish exploration of developing a distinctive voice and writing style" (*Chicago Tribune*). He contributes to blogs about language and writing for *The Chronicle of Higher Education* and the *New York Times*, and he writes a personal blog about British words and expressions that have been adopted in American English. His new book offers writing advice on subjects ranging from diction and grammar to cadence and tone. Mr. Yagoda will choose three example essays to critique from the stage. Please send submissions to authorevents@freelibrary.org. Chosen essayists will receive a free copy of *How To Not Write Bad*. FREE. No tickets required. For Info: 215-567-4341.

Tuesday, March 19, 2013 at 12:00 to 1:00 PM at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106
 Tel: 215-925-2222 • <http://www.chemheritage.org>
"Pure Culture: Traditional Industry and Microbial Studies in Early 20th-Century Japan"
 A talk by Victoria Lee

Ubiquitous in everyday life—with people eating and fermenting miso (fermented soybean paste) and natto (fermented soybeans) at home—yet highly polished by centuries of industrial specialization and licensed monopoly in the professional brewing houses, fermentation processes are also an area of scientific expertise in Japan that forms the backbone of modern science-based bioindustry and biotechnology. The development of biosynthetic technologies that use microbes to create new substances—from enzymes to vitamins, monosodium glutamate to statins—reveals how tradition and high technology are two sides of the same coin.

This talk explores an early part of this history by looking at the upgrade of the sake and soy-sauce industries through the introduction of pure culture techniques in the first three decades of the 20th century and especially for *kōji* (the rice mold used in traditional brewing). Pure culture practices came to be essential to both scientific study and industrial processes, and moreover had a precedent in the techniques of *tanekōji* (microbial starter) makers. This talk looks at the complementary roles of public research and private industry in developing new technologies, and how established technological processes in the traditional industries

contributed to the development of scientific knowledge. Finally, it examines the broader significance of the improvement of traditional industry in the formation of a scientific culture that prized innovation in microbial techniques.

Victoria Lee is a Ph.D. candidate in the Program in History of Science at Princeton University, completing a dissertation entitled "The Arts of the Microbial World: Biosynthetic Technologies in Twentieth-Century Japan." Free and open to the public.

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

<http://www.thelaurehillcemetery.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 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.

March'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; \$5/members. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online. Guide: David Horwitz, Ph.D.

Saturday, March 23, 2013 at 1:00 PM at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

FAMILIAR PHILADELPHIA

The tour will take place on, departing 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; \$10/students and seniors; \$9/members. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online.

Guide: Russ Dodge

Sunday, March 24, 2013 at 1:00 PM at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

CLASSY BROADS and DARING DAMES:

THE LADIES OF LAUREL HILL

A WOMEN'S HISTORY MONTH PROGRAM

Laurel Hill Cemetery marks Women's History Month with a program honoring some of our most accomplished broads and dames. What do the Broad Street Subway, the Philadelphia Orchestra, Atlantic City and the Titanic have in common? All are part of the life stories of some of the women buried in Central Laurel Hill Cemetery. Join us in meeting them – along with other ladies who were important to the city we all love – as we walk through what is now considered the "youngest" section of Laurel Hill, established in 1855. This inspirational walking tour will conclude with a toast to classy broads and daring dames of past...and present.

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; \$10/students and seniors; \$9/members. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online. Guide: Carol R. Yaster



I support the aims of PhACT and would like to join/rejoin for the next year. The annual membership is \$15 and \$10 for students which includes e-mail delivery of Phactum.

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Prizes awarded in 2010	= \$ 300.00
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Prizes awarded in 2012	= \$ 150.00
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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

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