

""We must dare to think about 'unthinkable things' because when things become 'unthinkable' thinking stops and action becomes mindless."

~ J. William Fulbright,  
US Senator (D-AR)  
(1905-1995)

# Phactum

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

March 2013

editor: Ray Haupt    email: [phactpublicity@aol.com](mailto:phactpublicity@aol.com)  
Webmaster: Wes Powers    <http://phact.org/>

## PhACT Meeting - Saturday, March 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  
Bob Glickman, President of PhACT



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 exhibits that will amuse skeptics.

The Museum lives at [www.facebook.com/emptymuseum](http://www.facebook.com/emptymuseum)

Even in high school, a rule that permits only one point of view to be expressed is less likely to produce correct answers than the open discussion of countervailing views."

~ John Paul Stevens, Senior Associate Justice of the US Supreme Court,  
Morse v. Frederick (2007)

**"It is especially important to encourage unorthodox thinking when the situation is critical: At such moments every new word and fresh thought is more precious than gold. Indeed, people must not be deprived of the right to think their own thoughts."**

**~ Boris Yeltsin, Former President of Russia, Against the Grain, 1990**

We agree with President Yeltsin that people must not be deprived of the right to think their own thoughts. We encourage PhACT members and Phactum readers to think critically about things and write down those thoughts in the form of short essays and letters to be published in Phactum. Writing is a great way to refine your thinking and share your thoughts with others who may be of similar mind.

So take pen to paper and articulate your thoughts about some matter of life or science that you may have been pondering and share your ideas in a letter or article in Phactum. Subject matter is nearly unlimited and may encompass aspects of science, pseudoscience, alternative medicine, the Cosmos, witchcraft, freedom of speech, and limitless other topics.

We would very much like participation from Creationists, clairvoyants, fortune tellers, anti-vaccine protestors, and others often challenged by Skeptics. Student letters and essays are especially welcome. Original poetry is very welcome.

We do eschew articles and letters concerning electoral politics, but specific issues are fair game., especially those concerning science and medicine.

Send submissions to the Phactum Editor at  
[phactpublicity@aol.com](mailto:phactpublicity@aol.com)

Boris Nikolayevich Yeltsin (1931-2007) was a Russian politician and the first President of the Russian Federation, serving from 1991 to 1999.

Upon the resignation of Mikhail Gorbachev and the final dissolution of the Soviet Union in 1991 Yeltsin remained in office as the President of the Russian Federation. He vowed to transform Russia's socialist command economy into a free market economy and implemented economic shock therapy, price liberalization and privatization programs. In 1999, Yeltsin announced his resignation, leaving the presidency in the hands of his chosen successor, then-Prime Minister Vladimir Putin.



## Phactum Table Of Contents

<a href="#">Letters to the Editor</a>	p. 5
<a href="#">Various Ruminations</a>	p. 6
<a href="#">February Meeting Report</a>	p. 9
<a href="#">By Catherine Fiorello</a>	
<a href="#">The Veritable Truth</a>	p. 11
<a href="#">By Paul Schlueter III</a>	
<a href="#">Calendar of Events</a>	p. 15

**MCHUMOR.com** by T. McCracken



"Ann, you're the best graduate student I have, so I'm going to blame some faulty research on you."

**The Philadelphia Association for Critical Thinking  
in partnership with the Franklin Institute  
Invites You  
To a science oriented lecture by:  
**The Amazing James Randi**  
Who will also Create Illusions that Amuse and Astound**



Artist: Amy Davis Roth

[surlyramics.com](http://surlyramics.com)

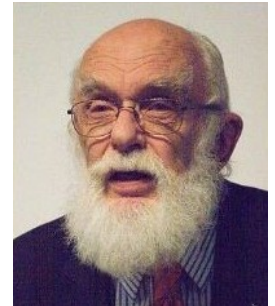
**At the Franklin Institute,  
20th and Benjamin Franklin Parkway  
Saturday, April 20, 2013 at 11:00 AM to 1:00 PM  
Free and open to the Public. Seating is limited.**





## 2013 Philadelphia Science Festival April 18 – April 28

PhACT's contribution to the 2013 Philadelphia Science Festival will be, in partnership with the Franklin Institute, to host **James "The Amazing" Randi** who will present a program of science and magic to mystify, amuse, and to educate.



**At the Franklin Institute  
Saturday, April 20, 2013 at 11:00 AM to 1:00 PM  
Free and open to the Public. Seating is limited.**

James "the Amazing" Randi has an international reputation as a magician and escape artist, but today he is best known as the world's most tireless investigator and demystifier of paranormal and pseudoscientific claims. He has received numerous awards and recognitions, including a Fellowship from the John D. and Catherine T. MacArthur Foundation and a one-hour PBS NOVA special on Randi's major investigations. He is the author of numerous books, including *The Truth About Uri Geller*, *The Faith Healers*, *Flim-Flam!*, and *An Encyclopedia of Claims, Frauds, and Hoaxes of the Occult and Supernatural*. His lectures and television appearances have delighted — and vexed — audiences around the world. In 1996, the James Randi Education Foundation was established to further Randi's work. Randi's long-standing challenge to psychics now stands as a \$1,000,000 prize administered by the Foundation. It remains unclaimed.



**SURLY-RAMICS**  
ART YOU CAN WEAR™

ONE-OF-A-KIND • HANDMADE • CERAMIC

**JEWELRY FOR SMART PEOPLE**

USE THE CODE:  
FREETHOUGHT  
FOR FREE SHIPPING IN THE USA!

**SURLYRAMICS.COM  
SURLY.ETSY.COM**



# Letters to the Editor

Editor:

Believe it or not:

1. Edwin Booth, the famous actor and brother of the infamous John Wilkes Booth, assassin of Abraham Lincoln, once saved the life of Robert Todd Lincoln, President Lincoln's son.

2. Claudene Christian, the great-great-great-great-great-granddaughter of Fletcher Christian, chief mutineer of HMS Bounty, died as a result of the sinking, by Hurricane Sandy, of the replica Bounty, originally built for the 1962 film *Mutiny on the Bounty*.

All knowledge is provisional (so I guess I should write, all knowledge is probably provisional), so I'll just go so far as to say, the first is probably mostly true, the second probably not.

The Booth-Lincoln story is reasonably well-known to history buffs and some others, and has been described, with greater or lesser veracity, in a number of sources. Probably the most reliable is the account by Robert Todd Lincoln himself, in a letter that was printed in a periodical called *Valentine's Manual of Old New York*. It can be found online.

Lincoln describes how, in 1863 or 1864, he was in a crowd waiting to board a train. "The train was in the station with the platform of its cars level with the passenger's platform... I was pressed against the car... the train began to move... its movement... dropped [me] down into the space between the car and the platform... in a dangerous position... I was seized from behind by the collar and a powerful jerk... brought me to my feet on the platform... I turned to thank my rescuer and in doing so recognized Mr. Booth..." Edwin Booth was a famous actor and Lincoln had often seen him on the stage. Booth didn't recognize Lincoln (who was not well known enough to be generally recognized), and apparently didn't have occasion to catch his name. Booth only learned it was Lincoln after an Army officer to whom Lincoln had told the story wrote to Booth about it.

Lincoln continues, "The motion of the train had stopped, for it was only a movement of a few feet..." So the usual story, that Booth saved Lincoln's life, is probably not accurate, though Booth possibly saved Lincoln from serious injury.

The replica *Bounty* was built in 1960 for the 1962 movie *Mutiny on the Bounty*, starring Marlon Brando as Fletcher Christian. It was scheduled to be burned at the end of the film—as the original was burned by some of the mutineers

off Pitcairn Island—but Brando protested, and it was saved, to be used in other movies, as a tourist attraction, and for other various uses to which an obsolete wooden sailing ship is put. It sank in the rough seas wrought by Hurricane Sandy off Cape Hatteras (the "graveyard of the Atlantic") on 29 October 2012. Fourteen of the sixteen on board were saved, but the captain (Walbridge, not Bligh—get real) and crew-member Claudene Christian, 42, didn't make it. I read online at various sites that Claudene Christian was, or at least claimed to be, related to Fletcher Christian, the leader of the mutiny on board HMS *Bounty* in 1789. That seemed perfectly plausible to me. But other sources had it that she was a direct descendant, or more specifically the great-great-great-great-great-granddaughter, of Fletcher Christian. As that information was presented I was skeptical from the start.

For one thing, I figured the genealogy of the descendants of the mutineers was reasonably well worked out. After all, some of them, some bearing the surnames of the mutineers, including Christian, live on Pitcairn Island to this day. I would think that if she really was who she thought she was, the details of her descent from Fletcher Christian would be known, and presented in some form or another—but no information of that sort is in any of the articles I've found. Furthermore, the Christians and Blighs supposedly have an annual reunion in England,

"and that's something I would love to attend", she is quoted as saying. If she was a Fletcher Christian Christian, wouldn't she have been to a reunion already?

Through the miracle of the modern internet, I found the Pitcairn Islands Study Center at Pacific Union College in Angwin, California, and emailed its director, Herbert Ford, with my doubts. (If I really wanted to push it I could also contact the Pitcairn Islands Study Group and the Pitcairn & Norfolk Islands Society.) Mr. Ford replied, "Like you, I do not believe that Claudene Christian had a direct relationship with the mutineer of H.M.S. *Bounty*. I've seen many a genealogical chart going back [to] the mutineers, and in none of them do I find the name of Claudene or her parents. I've learned never to say "never" relating to anything relating to the *Bounty* Saga or its aftermath, but until I see something more definitive than has come before my eyes thus far, I'm of the opinion that lady was not a direct descendant of Fletcher Christian."

Howard J. Wilk  
Philadelphia

**Fletcher Christian (1764-1793)**



**Best known as a Royal Navy mutineer, Fletcher Christian clearly bears little resemblance to Clark Gable, Marlon Brando, Mel Gibson, and certainly not Errol Flynn.**



# Various Ruminations

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

## "CAM" Cancer Therapy Guide Published

Dr. Stephen Barrett reported this item in his Consumer Health Digest of February 7, 2013.

Barrie Cassileth, Ph.D., who heads the Integrative Medicine Department at Memorial Sloan-Kettering Cancer Center has compiled The Complete Guide to Complementary Therapies in Cancer Care to help patients and professionals place the claims made for offbeat cancer treatments in perspective. The book explains what each modality is, what practitioners say it does, the beliefs upon which it is based, the research evidence to date, and what it can do for you (usually nothing). References and additional information are available on the MSKCC Web site.

<http://www.mskcc.org/cancer-care/integrative-medicine/about-herbs-botanicals-other-products>

Dr. Cassileth was PhACT's speaker February 2009 addressing the matter of Complementary and Alternative medicine. See a brief description of her book at the bottom of this page.

## Duane Gish, R.I.P.

Duane Gish (1921-2013) passed away on March 5th. Gish was well known as a standard bearer of the Creationist movement and equally well known, or infamous, to Darwinists for being a ferocious debater of his point of view.

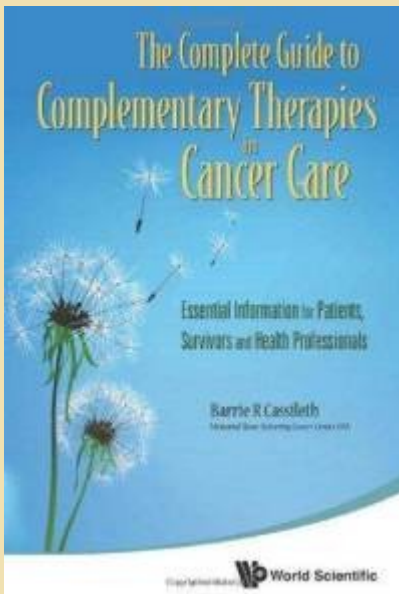
It might be tempting to dismiss Gish for being non-scientific but in fact he had earned considerable credentials in science having obtained a PhD in Chemistry at University of California, Los Angeles in 1953, was assistant professor of biochemistry at Cornell University Medical College from 1956-1960, became a researcher at University of California, Berkeley from 1956 to 1960, and was employed by the Upjohn Company as a researcher from 1960 to 1971.

1971 Gish left the Upjohn Company to join the faculty at the newly established Christian Heritage College and its research division. In 1972, the College changed its name to the Institute for Creation Research, and Dr. Gish has served as Associate Director and Vice President since that time.

Gish loved to engage scientists in debate about Evolution and Creation. In some forums such as Christian colleges there is little doubt that in the minds of the attendees he did vanquish his debate opponents by inventing facts as suiting his needs at the time then to quickly change the subject instead of answering rebuttal. At a state university he would not likely fare so well using those tactics. Gish's debate tactic of flooding discussion with a vast array of facts and fig-

## The Complete Guide to Complementary Therapies in Cancer Care: Essential Information for Patients, Survivors and Health Professionals

By Barrie R. Cassileth, Ph.D.



**Paperback: 380 pages Publisher: World Scientific Publishing Company;**  
**Publication Date: July 18, 2011**  
**ISBN-10: 9814335169 | ISBN-13: 978-9814335164**

With recent clinical advances, millions of people survive many years after a cancer diagnosis. And while their physicians deliver conventional, evidence-based therapies to treat the cancer, sometimes the cancer patient and his or her symptoms are not treated with equal skill. To manage their physical and emotional symptoms and promote health and well-being, most cancer patients and survivors use complementary therapies: Naturopathy, Ayurveda, herbalism, homeopathy, hypnosis, yoga, acupuncture, music therapy, macrobiotics, chelation therapy, colonics, hydrotherapy and many, many more. But ... are they safe? Are they effective? What problems do they address? What are the risks? When can they help?

This unique and comprehensive book guides the way through the often confusing maze of complementary and alternative therapies promoted to cancer patients and survivors. The functions, benefits, backgrounds and risks are clearly presented. Learning when, if and how to use them provides medical professionals, cancer patients and survivors with the information they need to better control the symptoms and side effects of cancer and its treatment.

Unfortunately, using some of these therapies without this expert guidance can lead to medical complications, or worse.

The Complete Guide to Complementary Therapies in Cancer Care is an invaluable resource in making educated health care decisions for managing life during and after cancer. Through the wise and informed use of these approaches, cancer patients -- whether just-diagnosed, during treatment or throughout Survivors are better able to manage the physical and emotional stresses that accompany cancer, leading to symptom control and improved quality of life.



**Duane T. Gish, Ph.D.**  
(1921-2013)

ures, not necessarily true or relevant, in an attempt to cause a debate opponent to falter. This became known as the “Gish Gallop”. It would have been fun for PhACT to have hosted Dr. Gish for a lecture.

A prolific writer, Gish’s most famous book was “Evolution: The Fossils Say No!” That book had been updated by Gish in a revelation called “Evolution: The Fossils Still Say No!” See bottom of page.

Get a load of this portion of a statement about Gish by John D.

Morris, Ph.D. at the Institute for Creation Research.

<http://www.icr.org/article/1743/>

*“He will be especially well remembered for his prowess in creation/evolution debates. I can’t imagine how anyone could understand more issues, control more data, remember more sources, and articulate them more clearly than Duane Gish. He will be sorely missed. Already we are finding him impossible to replace.*

*Much has been made of his numerous debate victories. I can remember one he did not win. In preparation for my first formal debate back in 1985, we held a mock debate before the ICR staff. Playing the part of the evolutionist, he pulled every dirty trick on me that had been pulled on him. Thankfully I had been to lunch with him enough to know the answers to the tricks. Most thought the debate ended in a draw. Even with Duane Gish as an advocate, evolution is a loser.”*

How strange this man was. He had significant training and employment as a scientist at major research institutions. In his field of bio-chemistry he must surely have had a deep understanding of evolutionary biology; nonetheless he spent a lifetime stirring the cauldron of pseudoscience. Why? What impels such people? Perhaps it is the desire to be a big fish within an evaporating pond bolstered by big ego and blinding religious fervor. I have no better explanation but invite input on the matter.

REVERENDFUN.COM COPYRIGHT BIBLE GATEWAY

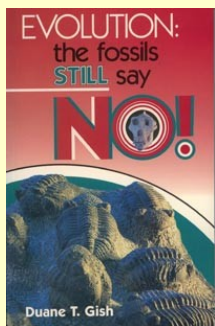


Thanks to Dad Hengeveld (See Genesis 6-8)

02-05-2010

I'M SORRY SIR, BUT YOU'LL HAVE TO PAY  
\$25 FOR THE SECOND BAG OR I CANNOT LET  
YOU BOARD ... ARK POLICY

Copyright Gospel Communications International Inc.  
Www.reverendfun.com  
Used by Permission



## **Evolution: The Fossils Still Say No!** by Duane Gish, Institute for Creation Research,

**ISBN 0-89051-112-8, 1995, 391 pages**

The most capable man in denominational creationism is Duane Gish. Gish has debated the top evolutionists all around the world, has written extensively, and has had the credentials to answer many technical questions that other creationists cannot handle. In 1973, he wrote a book titled Evolution: The Fossils Say No! This book is a reprint of the original with updating and the addition of some new contemporary finds.

This is a book on fossils, as the title implies. Detailed discussions of fossils make up most of the book after opening discussions about philosophy and creation and evolution models. One of the strengths of the first book was that it did not get bogged down in trying to prove a young earth, and that is true again in this version with only seven pages skimming the time issue. Page 53 in the book surveys fossils and attempts to debunk evolutionary claims by pointing out assumptions or errors in the way fossils have been presented in the past. Exhaustive quotes of experts are used--sometimes out of context to be sure, but they are used instead of quoting creationists or non-qualified people in the field.

If you are looking for a technical book on fossils to oppose evolution, this is a book you will want to have.

## Gambling Notes

We have not reported on the matters of gambling and gambling addiction for quite some time. Here are a few notes on those topics.

### ♣ - Online gambling - How long until it's legal everywhere?

"Prohibition, like the prohibition of alcohol, just doesn't work," said Joseph Kelly, a professor at Buffalo State College in New York who has consulted with governments outside the United States that have considered legalizing online gambling. "I like to think of (legalization) as recapturing revenues." But gambling opponents, consumer advocates and addiction researchers warn of potentially dire consequences. "This is the most predatory business in the country," said Les Bernal, national director of Stop Predatory Gambling, a non-profit group opposed to commercial and state-sponsored gambling. "They're about creating new players and getting them to be out of control."

[http://www.contracostatimes.com/breaking-news/ci\\_22732339/online-gambling-how-long-until-its-legal-everywhere](http://www.contracostatimes.com/breaking-news/ci_22732339/online-gambling-how-long-until-its-legal-everywhere)

### ♣ - Philadelphia emerges as East Coast gambling hub

Ten years ago, if you were a Philadelphia resident and wanted to gamble, you had two main options: Drive the hour to Atlantic City or head to the airport and hop a flight to Vegas. Today the landscape is remarkably different. In the last decade—the last six years it has established itself as one of the fastest-growing gambling areas in the country, adding three casinos in the immediate area and two just a short drive away. Together, since 2006, these facilities have helped make Pennsylvania the No. 2 gambling market in the country, behind only Las Vegas.

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

### ♣ - Is gambling spreading faster than other addictions? You can bet it is

Researchers at the University of Buffalo's Research Institute on Addictions reported survey results in 2011 showing that the number of problem gamblers now exceeds the number of persons with alcohol dependence. Skepticism was initially expressed by longtime addictions specialists. Combining data from two U.S. national surveys in which a total of about 5,000 people were interviewed, age patterns for gambling and alcohol involvement were compared. What emerged was the finding that after 21 years of age, alcohol abuse dropped off and gambling problems multiplied until, from ages 31 through 40, gambling was a bigger problem than alcohol abuse.

<http://www.expertclick.com/NRWire/Releasedetails.aspx?id=42892>

### ♣ - Online gambling - Silicon Valley's new obsession

Silicon Valley is betting that online gambling is its next billion-dollar business, with developers across the industry turning casual games into occasions for adults to wager. At the moment these games are aimed overseas, where attitudes

toward gambling are more relaxed and online betting is generally legal, and extremely lucrative. But game companies, from small teams to Facebook and Zynga, have their eye on the ultimate prize: the rich American market, where most types of real-money online wagers have been cleared by the Justice Department. Originally from the NY Times.

[http://articles.timesofindia.indiatimes.com/2013-02-19/strategy/37178518\\_1\\_mark-pincus-casual-games-zynga](http://articles.timesofindia.indiatimes.com/2013-02-19/strategy/37178518_1_mark-pincus-casual-games-zynga)

## Good News / Bad News

First, the **Good News**. Chechnya leader Ramzan Kadyrov has ordered a hard line for wizards, sorcerers, psychics, and faith healers. Their practices may be on the way out in Chechnya, a mountainous, overwhelmingly Muslim region in Russia's Caucasus. Mr Kadyrov said at a meeting with municipal leaders in Grozny, the capital, that people "turning to wizards and false healers won't bring them any relief and is banned by Islam."

And the **Bad News**. Since his election in 2005 Mr. Kadyrov has been eager to promote Islamic Mysticism. Folk belief is widespread in Chechnya, which many locals believe is a hotbed for Islamic spirits called djinns drawn there by the destruction from the wars, which killed tens of thousands and reduced much of the region to rubble. Mr Kadyrov was the driving force behind the Center for Islamic Medicine in Grozny, the largest Islamic folk hospital in Europe where healers perform djinn exorcisms by reading Quranic verses aloud.

SSDD - Similar Superstition, Different Diet

<http://www.telegraph.co.uk/news/worldnews/europe/russia/9862776/Sorcery-crackdown-Chechnya-leader-orders-hard-line-on-wizards.html>

MCHUMOR.COM by T. McCracken



"They're not testing any drugs on me. Instead they're providing spiritual advisers."



## Meeting Report - February 2013

### **“Behavioral Economics and the Libertarian Paternalism Approach to Policy” Or, When Does a Nudge Become a Shove? A lecture by Professor John Ruscio**

by Catherine A. Fiorello

Despite fears that this would be a political rather than a skeptical talk, Dr. Ruscio gave an interesting talk on the implications of psychology for economics. While classical economics assumes rational decision-making, behavioral economics takes into account the psychology of decision-making, including cognitive limitations, biases, and self-control problems. Libertarian Paternalism is a concept that is intended to preserve freedom of choice while nudging people in helpful ways. Dr. Ruscio briefly reviewed the history of behavioral economics. The initial work on behavioral economics was done by Daniel Kahneman, the only psychologist to win the Nobel Prize\* (in economics, for his work with the late Amos Tversky). Kahneman studied how heuristics and biases (such as availability, representativeness, and anchoring) affect economic decision-making. He also proposed prospect theory, which relates subjective to objective value, and points out our diminishing sensitivity to reward and our loss aversion. Another economist important in the history of behavioral economics is Richard Thaler, who studies economic anomalies, or violations of rationality. He discusses such anomalies as mental accounting, framing effects, the status quo bias, the endowment effect, herd behavior, and the sunk cost effect. Thaler and his colleague Cass Sunstein introduced the term libertarian paternalism and the concept of nudges in their book *Nudge: Improving Decisions About Health, Wealth, and Happiness*.

Dr. Ruscio reviewed five tools of libertarian paternalism. The first was changing the default option, as with organ donation. If people must opt in to organ donation, there is a low rate of organ donation. If people must opt out, there is a high rate of donation, but a question of whether people actively chose to be donors. By using a forced choice, we can encourage a high rate of organ donation, but also ensure that everyone has actively chosen to be a donor. The second tool of libertarian paternalism is facilitating commitments. These are ways that individuals can help themselves keep commitments, such as by putting oneself on a list to be banned from casinos. Dr. Ruscio also mentioned the website [stickK.com](http://stickK.com), which allows individuals to set their own goals, the stakes, the referee, and their supporters. The third tool of libertarian paternalism, the cooling-off period, is somewhat more paternalistic than the other tools. An example would be mandatory waiting periods for marriage, divorce, or gun purchases (Dr. Ruscio didn't mention abortion, but that is another decision that is often subject to mandatory waiting periods). Although this tool still allows individuals to make their own decisions, it does enforce the waiting period, which imposes costs. The fourth tool of libertarian paternalism is changing the way we provide information. Information that is framed in different ways may be understood more easily and allow individuals to make rational choices. An example is that the EPA now lists gallons per 100 miles on automobile sales stickers in addition to the more familiar miles per gallon. Using gallons per 100 miles makes it easier to compare the actual savings between two cars. The fifth tool of libertarian paternalism is sin taxes. Examples would be taxes on gasoline, alcohol, cigarettes, or even junk food. Dr. Ruscio felt that sin taxes cannot appropriately be considered libertarian, as they are more coercive than informational.

Dr. Ruscio then moved into the main part of his talk, a list of concerns to consider when implementing libertarian paternalism. This portion of the talk could be considered a primer on rational decision-making. Dr. Ruscio's first concern is that irrationality is not limited to citizens, but is also present in the policymakers. Our tendency to prefer the present benefits to future benefits is quite clear in current politics. A second concern is that nudges might be based on incomplete or incorrect information. A current example might include the way we demonize fat in the American diet. A third concern is that nudges do not take into account individual differences. If libertarian paternalism is intended to help people move toward their own values, policy nudges may not be aligned with everyone's values. What is an appropriate delay of gratification? A fourth concern is whose values might be sacrificed. For example, a person who rationally decides to accept a high interest rate on a credit card (because they know they will pay the balance off each month) in order to gain other advantages might lose the ability to do that if limits are placed on the interest rates that banks can charge. In protecting the less rational people, we are narrowing the choices of the more rational. A fifth concern is specific to sin taxes, which Dr. Ruscio described as “blunt instruments.” It is

difficult to calibrate sin taxes, and sin taxes tend to be regressive. Dr. Ruscio's sixth concern is the general question of when a nudge becomes a shove. He gave the example of removing the trays from cafeterias, which leads to less food waste, but leaves diners no choice. The seventh concern is that "the paternalism lasts after the libertarianism is gone." That is to say, there is a slippery slope which has been observed where providing information becomes social pressure which becomes prohibition. A current example is cigarette smoking, where information about its dangers has progressed through social pressure to blanket prohibitions in many jurisdictions. Dr. Ruscio's eighth concern is about the incentives operating on public institutions which might be implementing these policies. There are few penalties for being too controlling, as elections are almost never focused on a single issue. A ninth concern is how to balance the welfare of the public versus the cost of the guilt, shame, and fear induced by libertarian paternalism. It is difficult to quantify the cost of these emotional reactions on individuals in order to balance it against the benefits. A tenth concern, similarly, is the difficulty in quantifying the cost of our loss of liberty in order to weigh it against the gains in public welfare. Dr. Ruscio's eleventh concern is again about those who make the policies. The incentives for those who choose the defaults are often such that what is rational for them, is harmful to the individual making the choice. As an example, Dr. Ruscio pointed out that the default retirement plan at Enron involved buying large amounts of Enron stock. And the final concern is that of the moral hazard of too much paternalism. If we remove the costs of making mistakes, how will people learn critical thinking?

\*More or less. It depends on how you count Roger Sperry, a neuropsychologist and neurobiologist who won the Nobel in Medicine.

*Catherine Fiorello, Ph.D. is a long time skeptic and PhACT member. She is a professor of Psychology at Temple University.*

Ω Ω Ω



View of Philadelphia from the wetlands at John Heinz National Wildlife Refuge at Tincum

## 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 Tincum 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.

For more information see: <http://www.fws.gov/heinz/welcome.htm>



Some residents of John Heinz National Wildlife Refuge - Photo by Bill Buchanan/USFWS



A trail follows Darby Creek at John Heinz National Wildlife Refuge at Tincum in Philadelphia. Photo by Heather Jerue, USFWS



# The Veritable Truth

by Paul Schlueter III

So, we wonder at times, where DOES the Truth lie? Not the ordinary truth, but Truth with a capital T, THE Truth of All Things.

See, truth can be a funny thing. It seems easy to grasp at times, yet at other times it is tantalizingly difficult to put your finger exactly upon it. One man's truth is often another man's myth, and yet another's carefully plotted fabrication.

The Biblical Jesus spoke Truths from time to time which were patent fables; he called them parables, and through them he made a greater point (the "moral" of his tale) by creating a straw man and walking him through a tidy, contrived set of circumstances, so that the outcome could be controlled neatly. It can be inconvenient (particularly when trying to preach) to stumble over the sort of real-life messiness and the complicating factors which make distinctions hazy. So, Jesus lied in order to better express a moral Truth. Nobody really held such license against him.

Our parents sometimes "spared [us] from the Truth" by either denying facts, or offering instead some sanitized euphemisms; the Stork is one tale that comes to mind. Certainly, there are things which one might call "delicate subjects," which kids might not clearly understand. Yet, show me the kid of that tender, questioning age who actually knows what a stork is? I have family members who are Jehovah's Witnesses, and in observance of their faith they informed their kids early on that there was no such thing as Santa, nor in fact any such thing as Christmas, neither subject actually having Biblical support. I guess it's good on the one hand to avoid telling the kids the myths and stories which they will later learn were false, along with some degree of heartbreak. On the other hand, I also think it's charming to escort a young child through the myths of our culture(s), playfully enjoying their wonder and amazement at Santa, the Easter Bunny, the Stork, fairies and leprechauns, unicorns and ogres, etc. So what if that later leaves them confused over Bigfoot, Nessie, E.T., the manifold varieties of Jesus, and the idea that Big Brother is looking out for our best interests?

At some point, some of us (by no means all of us) grow up and begin to question the stories upon which we were reared. Perhaps we wonder whether it's really true that "Africans have thicker skulls, and so they are unable to

swim." Perhaps we question our parents' faiths, beginning with the most incredible points, and then gradually questioning the remaining tenets that we had always just accepted because that's what we were told. If we were raised Republican capitalists, perhaps we daringly experiment with socialist Democratic ideas, just to see how far we can stretch the logic (or, of course, vice versa).

## RELATIVE TRUTH

One of the most pernicious ideas in our culture is perhaps the concept that all Truth is Relative; relative to how one was raised, to the nationality of one's parents, to the political leanings of one's best friends, or to the heartfelt beliefs of our spouses. Relative Truth is the idea that each person's truth is as good as another's, that yours is no more valid than mine, that it's all according to how you "look at" a question, etc. This is the paradigm that enables Creationists to place their beliefs on "equal footing" with "belief in Evolution." By defining the conflicting positions as "beliefs," it's so much eas-

"It is not given to man to know the whole Truth. His duty lies in living up to the truth as he sees it, and in doing so, to resort to the purest means, i.e., to non-violence. God alone knows absolute truth. Therefore, I have often said, Truth is God. It follows that man, a finite being, cannot know absolute truth. Nobody in this world possesses absolute truth. This is God's attribute alone. Relative truth is all we know. Therefore, we can only follow the truth as we see it. Such pursuit of truth cannot lead anyone astray."

~ Mohandas Karamchand Gandhi (1869-1948)

ier to proclaim that "mine is just as good as yours."

So, is Truth simply whatever one chooses to believe? If so, then there's no reason to consider Robin Hood an outlaw (and, by direct comparison, neither was Jesse James). If you only "believe" that it's OK to steal from the rich to give to the poor, then OK it is. On the other hand, the rich "believe" it's OK to enslave the poor, to "tax" them relentlessly, to insist upon "noblesse oblige" with new brides, etc.



There lies the greatest problem with relative truth; the truth which will prevail is inevitably the one espoused by the strongest bunch of fellows. It all comes down to "Might makes Right," and we all know where THAT leads us.

Interestingly, the Law seems most concerned with relative truth. In our fair Commonwealth, the official rules of evidence declare that the oral testimony of a single witness, "if believed," is sufficient to uphold a criminal conviction potentially depriving a suspect of his freedom for the rest of his life. Circumstantial evidence, if not countered with credible defense evidence, is sufficient to uphold the imposition of a sentence of death! When "experts" disagree on matters requiring specialized training and experience, the least intelligent member of the Jury is perfectly entitled to determine for himself which expert's testimony is most "credible," and to rely on that conclusion in voting for the verdict. Science might sometimes prevail, but the big problem is that you cannot RELY on that outcome, Any Jurist might fairly act as a referee of the presentation of evidence, but s/he might just as easily use his/her discretion to sustain all the most specious objections of one side, while overruling even the soundest objections of the other, resulting in a horrifically skewed body of evidence (upon which the Jury is then bound by Law to rely).

Yet, just try to convince Legislators to revise Statute so that objective reason is held as a higher standard than the inflamed emotions of the mob; suddenly, everything becomes a matter of "rights" and "religious beliefs" and "cherished traditions" that one merely has to whisper, and the populace will take up the argument with a great emotional outcry. Remember 9/11? Remember the Patriot Act, which followed? We still haven't learned any better; witness the Newtown massacre, and the equally emotional race to impose new gun control laws (which may or may not have prevented Newtown, had they been in place then). To what does the 2nd Amendment entitle a citizen? It literally depends on "how you choose to look at it" (with a bit of interpretive guidance from a confused and conflicted Judicial system).

## OBJECTIVE TRUTH

Objective truth might most easily be understood as truth which comes from clear physical evidence. Science is often viewed as operating within the domain of objective truth, but that's only over the long term, when peer review and experimental replication, predictability and falsifiability can all have their effect in weeding out mistakes and errors from bias.

We DO have a substantial body of objective truth which came from science. We now know that the Earth orbits the sun, that some of those "stars" in the sky are entire distant galaxies, and that there are no little green men on Mars. All

the same, we're having a great deal of difficulty convincing some determined naysayers that global climate change is largely caused by human environmental abuse.

On the other hand, not so many of us would want to live in a world where objective truth were always held as the highest standard. How many Stephen Hawkings do you think we'd produce, if we took only a purely objective approach to coping with disease and disabilities? I'm talking about the so-called "Death Panels" of trained medical scientists who might otherwise sit in judgement on questions of expensive long-term care vs. euthanasia. Or, perhaps we'd simply revert to the supposed Spartan tradition of "exposing" unfit infants, rather than wasting societal resources on them. In a purely Nazi sense of evolution by natural selection, an objective society might very well find its way back to "Might makes Right" again, where only the fittest (the strongest, the most powerful, the most influential) may access the resources of society, leaving the rest of us to wither and die off.

So, there's a definite lack of built-in social fairness in the idea of Objective Truth. This goes a long way in explaining the "opiate" appeal of religion to the masses (as Nietzsche noted). Where the powers that be are most unfair, most meritocratic, and the least concerned with the fates of the poor, meek, and powerless, Religion (and Christianity, in particular) has great appeal. Tolerate the abuses of the rich and know your own place, Christians are told, and in the afterlife it will be YOUR turn, because in the divine logbook, Justice will prevail and the meek shall inherit the Earth...

Objective Truth always has to face down the general perception that it is cold, unfeeling, and beneficial only to the powers that be. Because it is constrained to tedious and esoteric rules of evidence and procedures that are meant to avoid bias, objectivity is all the more susceptible to the slick tactics of the easy answer, the emotional appeal, and distortions by the very biases objectivity seeks to avoid.

## REVEALED TRUTH

Revealed Truth is most commonly associated with Religion. When a prophet has a Revelation (it is believed), he is being given direct access to a Truth by some divinity. It is also claimed that Truth is revealed to mediums through spiritual means, involving lesser entities than deities perhaps, but still entities with some greater access to Truth than that available to us poor mortals.

The coolest part about Revealed Truth is that, once you put it out there, others are supposed to simply accept it without question, BECAUSE it was revealed by some "higher power." No mere human has a right to challenge the revealed word of God, right? Nor that of an angel. Nor that of any other supernatural being which cares to share its opinion, it would seem. Even former humans, simply by the act of dying and "moving on to the next world," are somehow empowered with greater wisdom and knowledge than we can have while living; just ask any Spiritualist!

Of course, this brings us to the battle of the prophets. See, we don't all have equal access to the revelations of superior

The very concept of objective truth is fading out of the world. Lies will pass into history.

~ Eric Arthur Blair aka George Orwell (1903-1950)

entities. Some people are supposedly granted special "gifts" of access to these messages, or so they tell the rest of us! Of course, one will say that the other one is "a false prophet," deliberately misleading believers, though such charges ap-

"Any person seasoned with a just sense of the imperfections of natural reason, will fly to revealed truth with the greatest avidity."

~ David Hume (1711-1776) - Scottish philosopher,

parently cannot be reversed, nor tried in any Court.

The Bible (and its various related texts from sister religions) is supposed to be the revealed word of the god called YHWH (Yahweh, a.k.a. Jehovah). Actually, The Word itself is strangely comingled with the deity, because "in the beginning," they co-existed as a sort of unity, prior to creating everything else. The Bible sets itself up as its own proof and authority, and declares itself to be the sole Truth; it says that all other revelation, all other prophecy, all other belief, is inferior or outright false. Never mind that it wasn't all written at once by any external deity; it was written by the hands of many different human men. Never mind that it wasn't written in even a single age; it was written across centuries, perhaps even a millennium of time, by prophets later accepted as credible by a group of men in yet another era of time, who had in turn declared one another qualified to receive the Revealed Truth and to know which writings (of very, very many) to adopt, and which to reject. Never mind that the Word itself is arcane, often self-contradictory, rarely directly on-point, and sometimes unintelligible; it is the revealed Word of God, and it must be interpreted (as necessary) by those with the Wisdom to understand it within the context of divine inspiration. Never mind that it was written at least 1,500 years ago, in a distant land, by peoples who had no concept of our modern world and issues; see the Wisdom and interpretation requirement mentioned above.

The Bible is not the only example of Revealed Truth, of course. Even discounting all the related works, other religions and prophets have written a broad variety of unrelated material, each expecting to be accepted on its own claims of credibility. Some claim adherence by millions of believers, yet what difference is there between ten credulous followers or ten thousand, or ten million? Is it up for some sort of vote now, or something? Does Might make Right, if it's a matter of numbers? Then, maybe the only way to preserve our favored beliefs is to commit a bit of ethnic cleansing and genocide, just to eliminate our competitors so they cannot outnumber us.

## INTUITIVE TRUTH

Intuitive truths are those which are discovered by intuitive processes. As it is currently understood, intuition is predominantly a subconscious analysis and summarization of

one's life memories, including facts, inferences, myths, instructions, beliefs, and so on. Intuition is a particularly valuable tool for the human mind when the quickest possible decision is required, and when the accuracy of the informational summary need not be very great.

It is quite certainly possible for one to arrive at "Truth" by intuitive means. One who is trained in critical thinking and reason to such a degree that they primarily rely upon those methods even while intuiting (subconsciously) is certainly more likely than the ordinary person to reach truth by intuitive means. Just as you're unlikely to land a surprise blow on the nose of a trained boxer, you're unlikely to cause a trained thinker to leap to an incorrect intuitive conclusion.

"The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift. We will not solve the problems of the world from the same level of thinking we were at when we created them. More than anything else, this new century demands new thinking: We must change our materially based analyses of the world around us to include broader, more multidimensional perspectives."

~ Albert Einstein (1879-1955)

His habits and subconscious methods of navigating the world are simply more likely to guide him in critical and reasonable directions.

However, it is dangerous to allow ourselves to develop a habit of relying upon intuitive thought where a reasoned conclusion is needed. In the example of a habitually religious person, his intuitions are most likely to lead him to recall a seemingly-relevant scripture or dogma of his practiced faith when presented with a question. This might be a good thing when it comes to a habitual reluctance against theft or assault, but it can be less desirable when it involves intuitive disgust at the sight of a homosexual kiss, or of the traditional dress of members of other faiths. An intuitive disgust against the consumption of "swine" might once have served Jews or Muslims well in helping them to avoid trichinosis, but now that we understand that the thorough cooking of pork kills the problematic parasite (rendering the meat reliably safe), the same intuition might very well leave a family needlessly hungry.

When examined closely, most of the objections to the concepts of evolution and natural selection are based in intuition, not in reason. This is often indicated by visceral reactions to the subject (i.e., feeling nauseous or getting a migraine), or when the person refuses to engage in conversation that even appears to be headed towards evolution.

In fact, when presented with reasons to accept the teachings of science, many intuitive people will reject the science simply due to an acquired distrust in science-based knowledge (perhaps acquired from Hollywood, from Church, or

from a parent's knee). I routinely find myself confronted by people who object not to WHAT I say, but to HOW I say it; my tone and demeanor strike an intuitive nerve in many people. I've been described as "arrogant," "aggressive," "too White," or just plain "know-it-all" by people who intuitively find listening to me distasteful enough that they refuse to consider my actual points.

A young person might find himself ignored and distrusted by elders, solely because of his age, when his education may very well have given him superior insights on some matter of concern. Elders have learned over the course of a lifetime that younger (and presumably less-experienced) people have less wisdom.

The familiar argument that "street smarts" is of greater value than "book smarts" is belied by the fact that knowledge can be much more efficiently transmitted by books than by each individual learning by hard knocks. Still, a person lacking the experience of achieving expertise through scholarly study is unlikely to overrule his own intuitive belief that first-hand experience is the best teacher. Intuition (and its sometime direct result, prejudice) can so often be found at the root of contention that we are best advised to question intuitive judgements and conclusions with strict critical thinking whenever possible.

In some matters, intuition might yet be quite useful; one example is the evaluation of different ways of addressing an emotionally-sensitive issue (the complex realm of emotion is so often literally unreasonable that the people who are best at handling emotional situations are often highly-intuitive people). This suggests that in matters of "emotional Truth," an intuitive analysis might be valuable. Is it wisest to always support your spouse's emotional needs, or to choose the most reasonable position regardless of which side your spouse espouses? The longevity of your marriage may very well depend upon your answer! The "little white lies" that spare feelings and support self esteem are also important social grooming skills, and truth in such circumstances can be counter-productive. A highly-reasoned approach to such social interaction is often less valuable than intuitive skill at ego-stroking. Sometimes, speaking literal Truth may not be the most ethical course of action.

I would go so far as to propose that intuitive truth is more often equivalent to emotional truth than to rational truth; this is, I think, simply a product of the vastly greater proportion of untrained, emotional minds which guide the intuitions of their users (as opposed to the relatively rare trained subconscious behind an intellectual's intuitions.) If that statistical ratio skews intuitive thinking more often into error than correct conclusion, we should value intuitive truth exactly that much the less.

## THE ULTIMATE TRUTH

This brings me, finally, to the question of where we might reliably find The Ultimate Truth, that truth by which we can reliably guide ourselves and our all-inclusive human society? My personal conclusion is that there is no single

ultimate truth that will serve the purpose, primarily because we humans do not broadly possess the intellect required to accurately analyze the entire "big picture," nor do many of us possess the self discipline to reliably choose the decision which sacrifices inevitable personal biases and self-interest in favor of something as esoteric as Truth.

Instead, we struggle with knowing how much to rely on our understanding of the Objective Truth, how much to give in to the sympathies of Intuitive and Relative Truths, and

"There is no such source of error as the pursuit of absolute truth."

~ Samuel Butler (1835-1902) - English novelist, essayist and critic

when it might just be most practical to rely on good old-fashioned Revealed Truth. Each of the many "ways of knowing" have their advantages and drawbacks, and each has a different level of appeal to each individual person. We'll never fully eliminate "ways of knowing" of which we might disapprove, nor will we ever be rid of the influential people who have a knack for manipulating truth to serve their own agendas, good or bad.

I think the only solution is to search out our own, and others', biases and influences, the distortions of reason and emotional factors which sway our thinking, and then apply our best effort to finding that truth which works out best for each situation. We need to value the individual as well as the society, and we need to serve the broader interests of society as well as we protect the individual's rights. Answers usually lie within the grey area, inside compromise; for the most part, extreme views, absolute rules, and rigid compliance with "One Truth for All" lead us into bad decisions. **T h i n k** critically, argue clearly, consider as many options as possible, but then decide with humanity and compassion, and accept that there is no Perfect Answer for Everything. We can only strive for our honest best effort.

Paul Schlueter III is serving Life in Prison in NE Pennsylvania. His supporters have created a website about him. [www.jaybird.org](http://www.jaybird.org)

Ω Ω Ω

"I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts."

~ Abraham Lincoln



# 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, March 16, 2013** - PhACT President Bob Glickman will lead discussion about **the Museum of Scientifically Proven Supernatural and Paranormal Phenomena**. See Page 1.

**Saturday, April 20, 2013** - PhACT will participate in the **2013 Philadelphia Science Festival**. **The Amazing James Randi** will be our guest speaker. See more on Page 3.

### **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](mailto: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>

**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 at 6 p.m.** at National Mechanics, 22 South Third St., Philadelphia 19106

**Science on Tap - A Philadelphia Science Café -eat. drink. science.**

#### Unexpected Specimens:

**Photo of a yeti? Letters from Hemingway? What's in the Academy Archives, anyway?**

Clare Flemming will lead discussion of the Academy of Natural Sciences Archives, a collection of one-of-a-kind documents, art, artifacts, film, photos, field notes, illustrations, and memorabilia, tells the story of the Academy from its founding in March 1812 through its two centuries of existence. The collection is comprised of not only official Academy documents, but also an abundance of scientific and personal unpublished materials from research scientists and others associated with the Academy. Find out what we keep in the Archives, why we keep it, and how our oldest treasures contribute to current research. No appointment is required for this sneak peek into the Academy's Archives!

Flemming joined the Academy in 2009 as the Brooke Dolan Archivist and now directs the Library as well. Her early career included collection care, bibliographic research, fossil preparation, and field expeditions. She may be the only archivist we know who has described a species, an extinct fossil rodent from Jamaica (*Xaymaca fulvopulvis*), and has a species named after her—a blind cave scorpion from the West Indies (*Heteronebo clarea*).

Presented by the Academy of Natural Sciences.

Free and open to the public.

**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.

**Tuesday, March 12, 2013 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

[http://www.collphyphil.org/prog\\_calendar.htm](http://www.collphyphil.org/prog_calendar.htm)

The Annual Robert L. Sadoff, MD, FCPP Lecture:

#### "The Goodness of the Physician: Hippocrates to High Tech"

Since the time of the ancient Hippocratic authors, the physician's personal goodness and morality have been thought to play a significant role in healing. This concept faded in the 18th and 19th century as scientifically-based methods entered increasingly into diagnostic and therapeutic use. It gradually returned in the late 19th and early 20th century, only to be engulfed by the advent of biotechnology in the 1960s. Objectified medicine-at-a-distance has increasingly become the standard of care. The speaker plans to trace the history of the 2500 year notion of the physician's goodness as it has evolved into its present troubled and neglected state. He suggests new approaches to mitigating the associated loss of the personal bond between doctor and patient.

Speaker: Sherwin B. Nuland, MD, Clinical Professor of Surgery (retired) at Yale University

Sponsored by the College and its Section on Medicine, Ethics, and the Law

Free and open to the public. To register: <http://sadoff2013.eventbrite.com/#>

**Wednesday, March 13, 2013 at 6:30 pm** at World Cafe Live, 3025 Walnut Street, Philadelphia PA.

#### World Cafe Live

**"Liquid Crystals: An Oxymoron Necessary for Life and the Basis of Modern Displays"**

Peter Collings, Physics, Swarthmore College

Liquid crystals are a phase of matter just like the more familiar phases of matter (solids, liquids, and gases). Yet the properties of liquid crystals are so unique that they are both the fundamental building blocks of biological structure and the basis for the displays found in laptop computers and flat panel televisions (LCDs). The reason for these extraordinary properties is that liquid crystals represent a natural, delicate balance between the absence of all molecular ordering found in liquids and the high degree of molecular ordering found in solids. Additional applications are already in use and more are on the way.

Free and open to the Public.

**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.



### 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](mailto:Institute4RS@chc.edu)

See website: [www.irands.org](http://www.irands.org)

**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](http://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.

**Thursday, March 14, 2013 at 6:00PM-9:00PM (Presentation at 7:00PM)** at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway. <http://www.fi.edu>

#### "To Space and Back" Special Sneak Preview

Cost: \$5.00 per person, Free for Members Registration required.

Our first new Franklin Institute-produced planetarium show has its world premiere on March 18, but for this Night Skies program we'll host a special preview screening of the show! Check back beginning March 1 for details about how to register for the event. Registration WILL BE REQUIRED, as seating is limited.

#### Night Skies in the Observatory at the Franklin Institute Every second Thursday

##### About Night Skies in the Observatory



Hosted by Chief Astronomer at The Franklin Institute, Derrick Pitts, the Joel N. Bloom Observatory is open late to the public and offers 5 different telescopes for you to view celestial objects in the sky, including stars, planets, nebulae, and if conditions are right, a galaxy or two. The evening includes a Fels Planetarium show and a lecture or presentation (appropriate for ages 5 and up) on an astronomical or space science topic. The Observatory is staffed with

knowledgeable observers and free star maps are provided. Meet some BIG STARS on the second Thursday of each month at The Franklin Institute! Admission is \$5.00. Members are free. Advance reservations are not needed. Tickets are sold on-site when you arrive.

<http://www2.fi.edu/exhibits/permanent/bloomobservatory.php>

**Saturday, March 16, 2013 at 3:30 pm** at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

#### Annual Korsyn Lecture

#### Giza 3D: Old Pyramids, New Archaeological Research Tools

In this illustrated talk, Dr. Peter Der Manuelian, Director of Harvard University's Giza Project, summarizes some of the great discoveries and archaeological significance of, and fascinating personalities behind, the expeditions to the tombs and temples surrounding the famous Giza Pyramids. He presents new technologies for bringing old digs back to life for international collaborative research. Sponsored by the American Research Center in Egypt - Pennsylvania Chapter.

Admission: \$8, general public; \$5, Penn Museum members; free for ARCE members. For more information, visit [www.arce-pa.org](http://www.arce-pa.org)

## 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 1.**

**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

**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.thelaurelhilccemetery.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](mailto: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.

**Wednesday, March 20, 2013 at 12:00n – 1:00PM** 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](http://www.collphyphil.org/prog_calendar.htm)

**Food & Thought: The Paris Metro - A Ticket to French History**

The Paris Metro opened in July of 1900 during the International Exposition. It was a great hit right from the start, selling over 30,000 tickets on the opening day. And while its primary purpose is to be a rapid transit system through that beautiful city, the Paris Metro holds many other tantalizing attractions. Looked at singularly, they are quaint reminders of all-things-French, as most stations are named after at least one of the cross-streets where they're located. Upon closer examination however, the collection of all 294 station names reflect a somewhat representative history of French culture, science, and medicine. In this talk, Susan Plotkin, author of *The Paris Metro: A Ticket to French History*, will discuss the many scientific and technological achievements honored in the metro. Madame Curie, Louis Pasteur, the originator of the telegraph, three generations of botanists, the personal physician of Napoleon Bonaparte, a museum to invention created during the French Revolution, the inventor of descriptive geometry – all these and more are honored in the French Metro!

Speaker: Susan Plotkin, MLIS, Author of *The Paris Metro: A Ticket to French History*

Open to the Public. Price \$12.50 includes lunch. To register:

<http://parismetro.eventbrite.com/#>

**Thursday, March 21, 2013 at 7pm** at Head House Books (619 South 2nd Street)

**Strategy & Soul: a campaigner's tale of fighting billionaires, corrupt officials, and Philadelphia casinos**

Join as Daniel Hunter reads from his new book about the birth and strategy of Casino-Free Philadelphia. Re-live the finger numbing cold of *No Way Without Our Say*, the highlights of Philly's Ballot Box, the uncertainty during council hearings -- and learn about inside struggles and behind-the-scenes negotiations.

Read more, including an extract of the book, at:

[http://www.strategyandsoul.org/Strategy\\_and\\_Soul/Home.html](http://www.strategyandsoul.org/Strategy_and_Soul/Home.html)

This event is free and open to the public.

**Thursday, March 21, 2013 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

[http://www.collphyphil.org/prog\\_calendar.htm](http://www.collphyphil.org/prog_calendar.htm)

**Philadelphia's Lazaretto: Forgotten Monument to a Hidden History**

**Speaker: David Barnes, Associate Professor of History and Sociology of Science at the University of Pennsylvania**

The oldest surviving quarantine facility in the Western Hemisphere stands stately but empty and languishing on the banks of the Delaware



River not far from Philadelphia International Airport. The Lazaretto was built between 1799 and 1801 in response to a series of devastating yellow fever epidemics in what was then the nation's largest city and busiest seaport. It bears witness to a century of immigration, disease, and public health policy amid shifting anxieties about the urban environment and threats from abroad. David Barnes explores some under-appreciated and surprising aspects of quarantine in the nineteenth century through the lens of this always controversial but remarkably durable Philadelphia institution.

Sponsored by the College's Section on Medical History and the Section on

Public Health and Preventative Medicine.

Free and open to the public.

To register: <http://lazaretto.eventbrite.com/#>

**Thursday, March 21, 2013 at 6:30 PM** at The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103  
[www.ansp.org/environmental/](http://www.ansp.org/environmental/)

215-299-1108 [cep@ansp.org](mailto:cep@ansp.org)

**Green City, Clean Waters: What's the future of Philadelphia's waterways?**

Can we envision the future of urban sustainability by re-examining our urban past? Find out at our March 21 Bicentennial Town Square, a three-part program on urban planning and water management.

Hear an overview of Philadelphia's nationally recognized watersheds program, Green City, Clean Waters, which takes a groundbreaking approach to transforming the health of the city's waterways primarily through land-based strategies.

View a presentation by the winners of Infill Philadelphia's Soak It Up competition, which challenged participants to create innovative storm water management solutions for three specific sites in Philadelphia.

Special guest Eric Sanderson, senior conservation ecologist at the Wildlife Conservation Society, will discuss New York City's Mannahatta Project, a detailed study that uses Manhattan's ecological past to envision climate-resistant urban planning for the next 400 years.

This event is free and open to the public.

Networking reception 5:30-6:30 pm

Program 6:30-8 pm

Register here: <http://greencleanwaters-es2002.eventbrite.com>

**Friday, March 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.

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.thelaurelhillemetery.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



**Saturday, March 23, 2013 at 1:00 PM** at the Wagner Free Institute of Science, 1700 West Montgomery Avenue, Philadelphia, PA 19121  
ph 215-763-6529 [www.wagnerfreeinstitute.org](http://www.wagnerfreeinstitute.org)

**Westbrook Free Lectureship**

Dr. Richard B. Westbrook, Trustee of the Institute from 1884 until his death in 1899, established the Westbrook Free Lectureship as a means to encourage open discourse on scientific subjects, especially "disputed questions in science and the theories of Evolution." Since 1912 when the series began, Westbrook lecturers have included some of the most distinguished scientists and scholars of the past 100 years, among them John Dewey, George Gaylord Simpson, and Margaret Mead.

**Sustainable Seas: Vision and Reality  
Dr. Sylvia Earle**

**Mission Blue**

Once thought to be "too big to fail," the ocean is now in trouble. Ocean and coastal ecosystems account for some two-thirds of the world's capital, including half the oxygen we breathe, carbon sinks for climate regulation, storm protection, and food. Dr. Sylvia Earle, dubbed "Her Deepness" by the New York Times, will look at the past, present and future of the ocean. Join us to discuss ways to reverse the decline of our seas, the cornerstone of earth's life support system, and the actions needed to ensure their future, and ours.

Sylvia A. Earle is Explorer in Residence at the National Geographic Society, founder of the Deep Search Foundation, and former Chief Scientist of NOAA. Author of more than 175 publications and leader of more than 100 underwater expeditions, she is the recipient of more than 100 national and international awards. Her research concerns the ecology and conservation of marine ecosystems and deep sea exploration. She was named Time Magazine's first Hero for the Planet, a Living Legend by the Library of Congress, and was a 2009 winner of the TED Prize.

This event is free and open to the public.

Free will donations are gratefully accepted.



**Sunday, March 24, 2013 at 1:30pm-4pm** at the Upper Moreland Library in Willow Grove.

Upper Moreland Library 109 Park Avenue Willow Grove, PA

**Humanist Association of Greater Philadelphia (HAGP)**

<http://www.hagp.org>

**The Demise of Death: Prospects for Immortality**

**Ted Schick**

The Demise of Death: Prospects for Immortality: Ted Schick returns for a fascinating talk that you won't want to miss! "Nothing in this world is certain but death and taxes" noted Benjamin Franklin at the end of the 18th century. By the end of the 21st century, however, transhumanists claim that both will be a thing of the past. There will be no death because we will have discovered the causes of aging, created devices that can cure whatever ails us, and constructed computers capable of running the programs currently running on the wetware of our brains. There will be no taxes because these technologies will effectively eliminate scarcity. Nanofactories will be able to supply everybody's needs in abundance. In this talk, Ted will explore the various lines of research in genetics, nanotechnology, and robotics that promise to create this heaven on earth. Of the many questions these advances raise, one that is of interest to futurologists and humanists alike is: What will become of religion when immortality is a fact of life?

Dr. Theodore Schick is Head of the Philosophy Department and Director of the Muhlenberg Scholars Program at Muhlenberg College. Born in Davenport, Iowa, he received his B.A. from Harvard University and his PhD from Brown University. He is author of How to Think about Weird Things: Critical Thinking for a New Age, Doing Philosophy: An Introduction Through Thought Experiments and editor of Readings in the Philosophy of Science: From Positivism to Postmodernism. He serves on



## 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/](http://www.rittenhouseastronomicalsociety.org/)

the editorial board of *Philo* and has published numerous articles on the nature of knowledge, reality, and value.

HAGP program meetings are an opportunity for group members to come together with each other; become educated on a topic by hearing from a speaker; or discuss issues and explore ideas. Our lecture series covers a wide variety of subjects. Speakers have come from all over the Delaware Valley, many US states, and even abroad. Free and open to the Public.

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

<http://www.thelaurelhillemetery.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

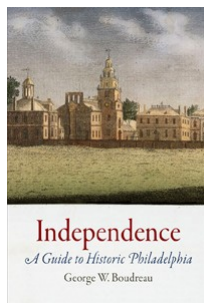
**Wednesday March 27, 2013 at 7:15 PM** at Brittingham's Irish Pub and Restaurant, 640 East Germantown Pike, Lafayette Hill, Pennsylvania. (610)828-7351.

**American Revolution Round Table of Philadelphia,**

<http://arrtop.com/>

George W. Boudreau will speak on his new book "**Independence, A Guide to Philadelphia**".

**GEORGE W. BOUDREAU** is a cultural historian of eighteenth-century America, specializing in the history of early Pennsylvania, the life of Benjamin Franklin, and material culture. An active public historian, he has worked with numerous historic sites in the Philadelphia region and was the founding editor of *Early American Studies: An Interdisciplinary Journal*. He teaches history at Penn State Capital College and lives in Philadelphia. Free and open to the Public.



**Wednesday, March 27, 2013 at 6:00 pm** at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

**Greece and Asia in the Late Bronze Age: The Historical Background of Homer's Iliad**

Dr. Wolf-Dietrich Niemeier, Director of the German Archaeological Institute at Athens, speaks. In 1924, Swiss archaeologist Emil Forrer announced a new discovery relating to the Trojan War. After examining texts found at Hattusa, once the capital of the Hittite empire in Asia Minor, he identified the Hittite words for Troy (Wilusa) and Mycenaean Greece (Ahhiyawa), and concluded that there was evidence for conflict between them. While Forrer's "Greek Hypothesis" was once widely attacked by other academics, recent research and excavations have confirmed his theory, which offers exciting insights into the historical background of Homer's Iliad.

Admission: Pay-what-you-want.

For more information, call 215.898.2680.

**Wednesday, March 28 2012 at 11:30am - 1:30pm** at Quorum at the University City Science Center,

3711 Market Street, Suite 800, Philadelphia, PA 19104

Presented by: University City Keystone Innovation Zone

University City Science Center

**Lunch for Hungry Minds: The Road to Biologic IND**

A key early milestone for any biopharmaceutical is filing and securing approval of an Investigational New Drug (IND) application to assess the new product in the clinic. The value of a new potential therapeutic skyrockets once clinical safety and efficacy are established. The route to the IND, however, requires in-depth technical, toxicological and regulatory expertise. Many discovery-based companies seek outside expert assistance in developing their discovery into a new biopharmaceutical suitable for evaluation in patients. This presentation will focus on the key areas needed to move down the road from discovery to successful IND submission, including:

**SPEAKERS**

Michiel E. Ultee, Ph.D., Chief Scientific Officer, Laureate Biopharma

Kary E. Thompson, Ph.D., Senior Toxicologist, Bristol Myers Squibb

Robert G. Burford, Ph.D., Vice President, Regulatory Affairs, Laureate Biopharma

Free and open to the public.

**Tuesday, April 2, 2013 at 7:00 PM** at the Washington Memorial Chapel at Valley Forge.

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

Thomas B. Allen, Author and historian will discuss **America's First Civil War**.

The American Revolution was a civil war, one that tore families, friends, and communities apart. Thousands of Americans fought on the British side – and paid the price after the war.

**Thomas B. Allen** is the author of numerous history books, including

George Washington,

Spymaster and Remember

Valley Forge. He and his

writer-son Roger

MacBride Allen are the

authors of the National

Geographic's Mr.

Lincoln's High-Tech War.

The former Associate

Chief of the National

Geographic Society's

Book Service, Allen has

written for National Geographic Magazine, the Smithsonian Magazine,

Military History Quarterly, and other publications.

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

Free and open to the public.





**Tuesday, April 2, 2013 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

[http://www.collphyphil.org/prog\\_calendar.htm](http://www.collphyphil.org/prog_calendar.htm)

**"A Vast Field of Suffering and Misery:" Florence Nightingale at Scutari**

**Speaker: Natasha McEnroe, Director, the Florence Nightingale Museum**

The mid-19th century popular press enabled the Crimean War to become the first conflict in which news from the field of battle was reported back swiftly to a waiting British population. The lack of care for soldiers and the conditions of the base hospitals so appalled the general public that action had to be taken. The true conditions of the infamous barracks hospital at Scutari will be examined, not just through the eyes of Nightingale herself, but from the point of view of her team of nurses, the findings of a Sanitary Commission, and the writings of the Reverend Sydney Godolphin Osbourne.

Sponsored by the Mütter Museum of The College of Physicians of Philadelphia.

Free and open to the public. To register:

<http://nightingalecpp.eventbrite.com/#>



**Florence Nightingale**

**Wednesday, April 3, 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/>

Open to the Public. Admission \$5.00

**Be there and be square!!**



**Wednesday, April 3, 2013 at 6:00 pm** at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

**"Great Battles"**

**A Philadelphia International Festival of the Arts Event**

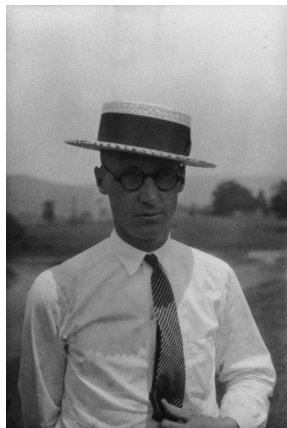
**The Scopes Monkey Trial**

The Scopes Monkey Trial (The State of Tennessee v. John Thomas Scopes) was a landmark American legal case in 1925 in which a high school science teacher, John Scopes, was accused of violating Tennessee's Butler Act, which made it unlawful to teach evolution. Modernists, who said religion was consistent with evolution, were set against religious fundamentalists in a trial that helped to fuel the controversy regarding teaching evolution in public schools. Dr. Janet Monge, Associate Curator-in-Charge and Keeper of Collections, Physical Anthropology Section, discusses this groundbreaking case.

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

To register, go to [www.penn.museum/greatbattles](http://www.penn.museum/greatbattles)

For more information, call 215.898.2680



**John T. Scopes  
(1900-1970)**

**Wednesday, April 3, 2013 • Reception: 5:30 p.m. • Program: 6:00 pm** at American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street

<http://www.amphilsoc.org/>

Co-sponsored by The Library Company of Philadelphia

**Master of the Mountain: Thomas Jefferson and His Slaves**

**HENRY WIENCEK**

**A lecture, reception, and book signing.**

Henry Wiencek, a prominent historian and writer, is the author of several books, including *The Hairstons: An American Family in Black and White*, which won a National Book Critics Circle Award in 1999, and *An Imperfect God: George Washington, His Slaves, and the Creation of America*, which won a Los Angeles Times Book Prize.

Is there anything new to say about Thomas Jefferson and slavery? The answer is a resounding yes. *Master of the Mountain*, Henry Wiencek's controversial book—based on new information coming from archaeological work at Monticello and on overlooked or disregarded evidence in Jefferson's papers—opens up a huge, poorly understood dimension of Jefferson's world. So far, historians have offered only easy irony or paradox to explain this extraordinary Founding Father who was an emancipationist in his youth and then recoiled from his own inspiring rhetoric and equivocated about slavery; who enjoyed his renown as a revolutionary leader yet kept some of his own children as slaves. But Wiencek's Jefferson is a man of business and public affairs who makes a success of his debt-ridden plantation thanks to what he calls the "silent profits" gained from his slaves—and thanks to a skewed moral universe that he and thousands of others readily inhabited. history with his elegantly drafted Declaration of Independence?

This event is Free and open to the Public but please register at:

<http://www.amphilsoc.org/node/3961>

**Thursday April 4, 2013 at 6:30 PM-10:00 PM** at The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103 [www.ansp.org](http://www.ansp.org) 215-299-1108

**Mega-Bad Movie Night: TBA**

Join us at the Academy after hours to watch some "awesomely awful" movies. The Academy's own experts will be onstage to comment on the many scientific absurdities—think *Mystery Science Theater 3000!*

In addition to the movie, Mega-Bad Movie Nights include cash bar and snacks, a sampling of the Academy's specimens, live animals, and the opportunity to wander among the exhibits including Butterflies!

Mega-Bad gets Mega-Better in 2013!

You asked and we listened! Our drink menu has just significantly expanded to include several beer selections and wine! Starting with the February Mega-Bad Movie, you can purchase drinks you want and still enjoy the snacks we provide!

You must be 18+ years of age to attend these events (and 21+ to drink).

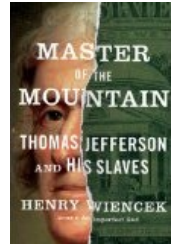
**Saturday, April 6, 2013 at 1:00pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurelhillemetery.org>

**DESIGNING for the DEAD:**

**THE ART and ARCHITECTURE of LAUREL HILL**

Noted architects like John Notman, William Strickland, Frank Furness, John J. McArthur, C.C. Zantlinger, Horace Trumbauer and Napoleon LeBrun competed fiercely for the chance to design for the dead. Join us on a walking tour of Laurel Hill Cemetery, where we will see monuments created by these early architects, as well as artists such as Alexander Milne Calder, his son Alexander Stirling Calder, and sculptress Harriet Frishmuth, whose works grace many of Laurel Hill's memorials. Tour stops will also include the gravesites of portraitist Thomas Sully and watercolorist William Trost Richards. The tour will examine changing tastes and fashions in grave markers over the past two centuries, from the classical obelisks and urns of the Federal period, to the richly decorated crosses of the Gothic Revival, to the massive mausoleums of the Gilded Age.



The walking tour will take place on Saturday, April 6 at 1:00pm, 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: Thomas H. Keels

**Sat. and Sun., April 6 & 7, 2013 - 10:00 AM to 4:00 PM** at Philadelphia's Historic Fort Mifflin, Fort Mifflin & Hog Island Roads.

The 3rd Regiment Infantry United States Colored Troops Civil War Re-enactors present Civil War Weekend. *"Rather Die Free Men, Than Live to be Slaves"*. See history come alive in commemoration of the 150th Anniversary of the Civil War and the Emancipation Proclamation. Free with the price of admission to the Fort.

For information contact Joe Becton, 215-834-7328. [www.3rdusct.org](http://www.3rdusct.org)

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

<http://delcoscience.org>

**"Frick's Lock to Du Pont- How the Industrial Revolution Saved America"**

**A lecture by Gene Pisale, author and member of Chester County Historical Society**

Lectures are FREE and presented upstairs in the Lecture Hall.

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

**Tuesday, April 9, 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.**

**"The Role of Place in Technology and Spirituality."**

John Staudenmaier, SJ, PH.D., Professor of History of Technology and Engineering Ethics and Assistant to the President for Mission & Identity, University of Detroit Mercy has served as editor-in-chief of Technology and Culture, The International Quarterly of the Society for the History of Technology (T&C), as visiting professor at MIT's Science, Technology and Society Program; as research fellow at MIT's Dibner Institute, as Gasson Professor at Boston College, and as visiting scholar at Santa Clara University's Center for Science Technology and Society. Staudenmaier consults with museums about exhibits, with television producers about historical programs, and with science and technology reporters about articles in process. A short sample of published works suggests the kinds of questions that attract his attention: Technology's Storytellers: Reweaving the Human Fabric (MIT Press); "The Politics and Ethics of Engineering;" "Denying the Holy Dark: The Enlightenment and the European Mystical Tradition;" and "Rationality vs. Contingency in the History of Technology." In 2011, The Society for the History of Technology presented him their Leonardo da Vinci Medal. The mp3 version of his plenary lecture can be found at <http://www.udmercy.edu/udmcasts/by-date/2011/11-04-staudenmaier-da-vinci.htm>

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

**Wednesday, April 10, 2013 at 6:30 pm** at World Cafe Live, 3025 Walnut Street, Philadelphia PA.

**World Cafe Live**

**"Ultrafast DNA sequencing - Speed reading the blueprint of life"**

Robert Johnson

Physics & Astronomy, University of Pennsylvania

The blueprints of a living creature are stored in long, chainlike molecules known as DNA. These blueprints are written in a code format using four chemical bases called A, C, G and T. The particular sequence of these bases determines almost everything about the creature including what type of creature it is, what it eats, what it looks like and how long it lives. We can learn an extraordinary amount about a living organism by reading the sequence of bases in its DNA. However, the number of bases in an

organism's DNA can be enormous and reading them all can be time consuming and expensive. For example, human DNA contains about 3 billion bases. The first complete sequence of human DNA was obtained in 2003 after about 12 years of work costing almost \$3 billion.

Cheaper, faster and more reliable methods to sequence DNA are highly desirable. These methods would not only facilitate biological research but also revolutionize medicine and personal healthcare. The ability to speed-read DNA could be achieved by threading DNA molecules through small holes in graphene (pictured above), a material closely related to graphite (pencil lead). In this talk I will describe current research towards the development of ultrafast DNA sequencing technology and how such technology could impact society. Free and open to the Public.

**Thursday, April 11, 2013 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103 215-686-5322

**Frans de Waal | The Bonobo and the Atheist: In Search of Humanism Among the Primates**

Drawing on a wealth of pioneering research, esteemed primatologist Frans de Waal traces the biological roots of human morality to primate social emotions, including empathy, reciprocity, and fairness in The Bonobo and the Atheist. Named one of Time's 100 Most Influential People, he is the C. H. Candler Professor in Emory University's Psychology Department. His many works include Our Inner Ape, Chimpanzee Politics: Power and Sex among Apes, and The Age of Empathy: Nature's Lessons for a Kinder Society. Dr. de Waal is a member of the National Academy of Sciences and the Royal Dutch Academy of Sciences, and directs the Living Links at the Yerkes National Primate Research Center.

Cost: \$15 General Admission, \$7 Students

Buy tickets online <http://libwww.freelibrary.org/authorevents/>

**Saturday, April 13, 2013 at 9:30-2:30** at the 1696 Thomas Massey House in Broomall, PA

**Hands-on Cooking Workshop: Puddings!**

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

**Sunday, April 14, 2013 at 1:00 pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA 19132. 215-228-8200

<http://www.thelaurelhillemetery.org>

**FOOTPRINTS of ANGELS at LAUREL HILL**

Famed poet, Henry Wadsworth Longfellow once noted that "He spake well who said that graves are the footprints of angels." Laurel Hill Cemetery is filled not only with the symbolic footprints of these heavenly beings, but with their images as well. Amid Springtime's blossoming promise of life, this tour will feature some of the cemetery's most beautiful depictions of angels, sculpted in various materials throughout Laurel Hill's Central section, including Millionaire's Row.

The tour will take place on Sunday, April 14 at 1:00pm, 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: Sonia Krutzke

**Monday, April 15, 2013 at 6 p.m.** at National Mechanics, 22 South Third St., Philadelphia 19106

**Science on Tap - A Philadelphia Science Café -eat. drink. science.**

Topic and Speaker TBA

Presented by the Mütter Museum of the College of Physicians of Philadelphia. Free and open to the Public.

**Wednesday, April 17, 2013 at 12:00n - 1:00 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](http://www.collphyphil.org/prog_calendar.htm)

### Food & Thought: Organ Transplantation: Views From Both Sides of the Bed

**Speaker: John Daly, MD, Harry C. Donahoo Professor of Surgery, Surgical Director, William Maul Measey Institute for Clinical Simulation and Patient Safety, Emeritus Dean, Temple University School of Medicine**

Marked progress has occurred in our ability to transplant cells and whole organs when damage to native organs has occurred from a variety of causes. The processes are quite different as seen by the care-giver, the recipient and the donor family. Yet many wait in vain for the life-saving procedure. The presentation will describe the current status of transplantation, impediments to expansion and potential solutions.

Free and open to the public.

To register: <http://organtransplants.eventbrite.com/#>

**Friday, April 19, 2013 at 12:00PM** at the Free Library of Philadelphia, Central Library, 1901 Vine Street, 19103

215-686-5322

### Cass Sunstein | **Simpler: The Future of Government**

The Felix Frankfurter Professor of Law at Harvard Law School, Cass Sunstein is the author of more than 35 books and textbooks. From 2009 to 2012, he served as the Administrator of the White House Office of Information and Regulatory Affairs. The coauthor of the bestselling book, *Nudge*, Sunstein guided the administration toward simplifying regulations with his innovative methods of “nudging” corporate behavior while protecting citizens and maximizing freedom and business opportunity. In *Simpler*, Sunstein demonstrates how an understanding of human nature can inform and steer the behavior of businesses, citizens, and governments about issues ranging from health care and obesity to financial reform, national security, energy, and the environment.

Cost: FREE

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

## PhACT Event

**Saturday, April 20, 2013 - at 11:AM PM**

**PhACT, in partnership with the Franklin Institute, will host The Amazing James Randi as part of The Philadelphia Science Festival**

**See page 3 and 4 for more details.**

**Saturday, April 20, 2013 at 1:00pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

### LIBERTY or DEATH:

#### REVOLUTIONARY WAR HEROES of LAUREL HILL

This week in history, the American Revolution began with the first exchange of fire between British and American forces at Lexington on April 19. “Give me liberty or give me death!” is the now famous line often attributed to Patrick Henry and his 1775 speech. But what about the Founding Fathers and patriots who truly did give their lives for that freedom we hold so near and dear to our hearts? Join us as we hear their rousing stories of victory, tragedy and revolution from their final places of rest here at Laurel Hill.

The walking tour will take place on Saturday, April 20 at 1:00pm, 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

**Saturday, April 20, 2013 at 1:00pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

### NATURE in the NECROPOLIS:

#### AN EARTH DAY EXPLORATION

The first official observance of Earth Day took place in 1970 as a day intended to inspire awareness and appreciation for the earth’s natural environment. Few sites have more appreciation for its “earth,” and all of the stories and secrets that lie beneath it than Laurel Hill. The resting place claims status as the first garden cemetery in the United States, boasting 78 acres of green space in the middle of the city. Start off your Earth Day properly at Laurel Hill, taking in its gorgeous river vistas, and learning of its history as a world-renowned arboretum. Participants will also aim to identify the many bird species, trees and horticultural specimens that still populate the site. Share your knowledge or just enjoy nature and the blooming springtime. Bring binoculars if you wish

The walking tour will take place on Saturday, April 20 at 1:00pm, 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 \$8/person general admission. Tickets can be purchased at the door, or in advance by phone (215) 228-8200 or online.

Guides: Bob Berghaier and Steve Maurer

**Saturday, April 20, 2013 at 11:00-4:00** at Colonial Pennsylvania Plantation, Ridley Creek State Park, Edgmont, PA.

Historian Clarissa Dillon, PhD

**Display and demonstration of using an 18th- century replica still to make a medicinal water.**

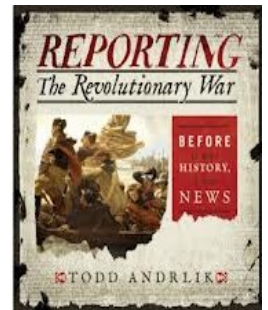
**Wednesday April 24, 2013 at 7:15 PM** at Brittingham's Irish Pub and Restaurant, 640 East Germantown Pike, Lafayette Hill, Pennsylvania. (610)828-7351.

### American Revolution Round Table of Philadelphia,

<http://arrtop.com/>

Bruce Mowday on the Battles of Brandywine and Germantown from the new book *Reporting The American Revolution*

Free and open to the Public.



**Thursday, April 25, 2013 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103 215-686-5322|

### The Dispensable Nation: American Foreign Policy in Retreat

#### Vali Nasr

Former State Department advisor for Afghanistan and Pakistan and Bloomberg View columnist Vali Nasr offers a powerful reassessment of United States foreign policy. Dean of the Johns Hopkins University’s School of Advanced International Studies, Nasr is a senior fellow of the Brookings Institution and a member of the U.S. State Department’s Foreign Policy Advisory Board. He has advised presidents and vice presidents, senior cabinet secretaries of both the Republican and Democratic parties, congressional committees, and military leaders. In *The Dispensable Nation: American Foreign Policy in Retreat*, he reveals how fear of political backlash and the threat of terrorism have crippled the efforts of diplomatic leaders. His previous books, *The Shia Revival* and *Forces of Fortune*, both contributed to U.S. policy formulated in response to postwar sectarian violence in Iraq and the Arab Spring.

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



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.

If you wish **US Mail delivery annual membership is \$25.** Checks should be payable to **PhACT.**

Membership dues of \$ \_\_\_\_\_ enclosed to pay for \_\_\_\_\_ years of membership.

Donation of \$ \_\_\_\_\_ enclosed for additional support  
Donation of \$ \_\_\_\_\_ dedicated for High School Science Fair prizes

**Mail checks to:**  
**PhACT**  
**653 Garden Road**  
**Glenside, PA 19038**

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_ E\_mail \_\_\_\_\_

**The Philadelphia Association for Critical Thinking is grateful** for the hospitality extended by Community College of Philadelphia and especially Dr. David Cattell, Chair of the Physics Department, for hosting PhACT and giving us access to such excellent facilities. Part of CCP's mission is to serve Philadelphia as a premiere learning institution and PhACT is pleased to support this goal by having talks on wide ranging, engaging, and educational topics. Students and faculty are invited to be active participants in our activities.

### **PhACT's High School Science Fair Student Prize Funds**

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](mailto:erickrieg@verizon.net)

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

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

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

#### **Policy For Article Use**

Except where otherwise noted all materials originating in Phactum may be reprinted by groups recognized in CSI's international network of skeptics organizations as published in Skeptical Inquirer. The author and Philadelphia Association for Critical Thinking must be credited. All other publications must obtain permission from PhACT before using any item.

Permission to use articles and illustrations originating from other sources must be granted by the original publisher.

Phactum Editor, Ray Haupt  
[phactpublicity@aol.com](mailto:phactpublicity@aol.com)

#### **The PhACT Council 2012/13**

Bob Glickman, President	Wes Powers, Webmaster
Dr. David Cragin, Ph.D., Vice-President	Mike Caro
Susan Glickman, Treasurer	David Cattell Ph.D.
Becky Strickland, Secretary	Ray Haupt
Eric Krieg, Past President	Dr. David Langdon, M.D.
	Tom Napier

The PhACT website is: [www.phact.org](http://www.phact.org)