

Since stars appear to be  
suns, and suns, according to  
the common opinion, are  
bodies that serve to  
enlighten, warm, and sustain  
a system of planets, we may  
have an idea of the  
numberless globes that serve  
for the habitation of living  
creatures.

— William Herschel, 1795

# Phactum

The Newsletter and Propaganda Organ of the  
Philadelphia Association for Critical Thinking  
September 2011

editor: Ray Haupt email: [phactpublicity@aol.com](mailto:phactpublicity@aol.com)

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

## PhACT Meeting - Saturday, September 17, 2011

at Community College of Philadelphia

in Room S2-3 of the Winnet Student Life Building at 2:00 PM

Dr. David Cattell, Chairman of the Physics Department of Philadelphia Community College, will host Earl Bennett, President of the Philadelphia Area Space Alliance, and SETI League member.

All are Welcome. This event is Free and Open to the Public. Handicap accessible.

## *The Search for Extra Terrestrial Intelligence*



Cartoon by Gruhn  
[gruhn@webdonuts.com](mailto:gruhn@webdonuts.com)  
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The Search for Extra Terrestrial Intelligence, or SETI, has gone on since it was first recognized that the planets and stars are objects like the earth and the Sun. Various techniques have been proposed, from dream journeys to lighting immense fires in the deserts, before we had electronics and nuclear technologies. Some of the present techniques will be discussed, and the possibilities of future systems based on what have been planned by various groups and organizations. Modern communications techniques in everyday use will be mentioned, and a few props will be brought to demonstrate a few concepts.

Our speaker is Earl Bennett, President of the Philadelphia Area Space Alliance, and SETI League member. Bennett was born in Philadelphia, in 1949, and attended Drexel University. His interest in

*(Continued on page 2)*

*To consider the Earth as the only populated world in infinite space is as absurd as to assert that in an entire field sown with millet, only one grain will grow.*

*~ Metrodorus of Chios, 4th century BC.*

space exploration and science has lead him to join various organizations including: The Seti League, The Planetary Society, Amsat (The Amateur Satellite Corporation), and The National Space Society, N.S.S. Earl has been President of the Philadelphia Area Space Alliance for a number of years. They promote science and technology education by performing outreach to the general public as guests of various museums and organizations.

Here are some web sites concerned with exploration of Outer Space and the Search for Extra Terrestrial Intelligence.

<http://phillypasa.blogspot.com/>

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

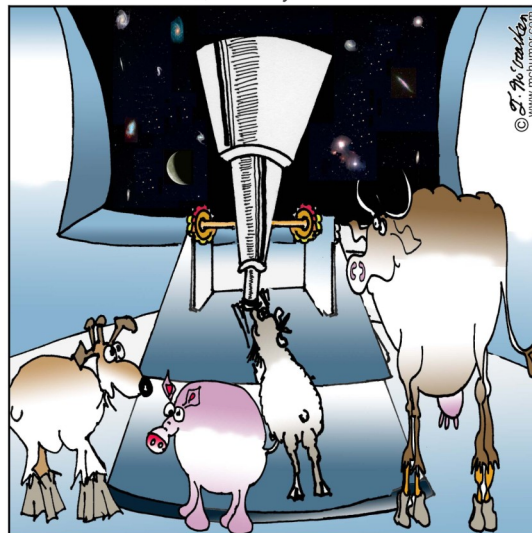
<http://www.setileague.org/>

<http://planetary.org/home/>

<http://www.amsat.org/amsat-new/satellites/status.php>

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**MCHUMOR.com** by T. McCracken



"I wonder if there's life as we know it on other planets."

Cartoon by T. McCracken  
<http://www.mchumor.com/>  
Used by Permission

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## Online PhACT Discussion Board

PhACT does have an online discussion board facility where skeptics, critical thinkers, and others can discuss whatever might be on their minds.

All are invited to participate in discussion of any topic that might be on your mind. You need not be a PhACT member. The discussion board may be found at: <http://phactforum.org/>

# Letters to the Editor

Editor: *"I wake up every morning at nine and grab for the morning paper. Then I look at the obituary page. If my name is not on it, I get up."*--Benjamin Franklin (Phactum, July/August 2011, p. 15). Oh really? Everything about this stinks of being a false attribution, the clever phrase automatically attributed to the famous clever person. You look up the quotation and you find lots of attributions to Franklin, but nobody actually places it precisely. The quotation strikes me as funny but not Franklin-funny; it sounds probably 20th century, possibly late 19th century, but not earlier (or later); in Franklin's autobiography his day starts at 5 AM ("Rise, wash, and address Powerful Goodness!...", and he's at work by 8. I'm too lazy to do the research needed to really nail this down, but it seems to be from Harry Hershfield, 1885-1974, the American "humorist and raconteur", in the words of his real obituary in the New York Times.

Howard J. Wilk  
Philadelphia, PA

PS It actually sounds more like Mark Twain than Benjamin Franklin, and would probably be falsely attributed to the former, if he didn't already have a quotable quote anent his obituary. (What he actually wrote was "The report of my death was an exaggeration.")

Editor's note: I did look a bit deeper into this and although there are more attributions to Franklin than Hershfield I could not find a source for either. It seems to me, as you suggest, that Hershfield is the more likely author. Whatever the truth or fiction as to authorship of that quote may be Franklin did coin this somewhat similar line:

## ***Death of a Lion***

***Boston, Jan. 3. Last Saturday Night, The LYON, King of Beasts, who had travelled all over North America by Sea and Land, died here in a Tan-yard. Like other***

***Kings, his Death was often reported, long before it happened.***

***The Pennsylvania Gazette, January 25, 1731/2***

Editor: L. Dave Leiter's letter fairly caught my blunder! He's entirely correct that I mistook RPM for revolutions per second, which would have made the statement about 45-60 Hz (a frequency audible to people as a low-pitched tone) valid. In fact, I should have divided RPM by 60, yielding pulse frequencies between about 0.75 and 1 Hz (a range well below the threshold of what we perceive as tones.) Actually, the pulses of such a hypothetical windmill would be around 5 octaves below the lowest frequency (20 Hz)


which humans are supposed to be able to hear. The pulses would still be audible (probably as "thumps" in the air), but they'd be more like bass drum beats than tones of the musical scale.

Good eye, Dave!  
Paul Schlueter III  
Dallas, PA

Editor: Re: Leiter, Phactum, July/August 2011 p. 13: I read online the Bengston paper Leiter cited (Bengston, W. F.; Krinsky, D. The Effect of the "Laying On of Hands" on Transplanted Breast Cancer in Mice Journal of Scientific Exploration 2000, 14(3), 353-364). In any publication there is the possibility of mistakes or misconduct; I have no reason to believe either is the case here, so I will provisionally accept the results as described. It is important to point out that the authors do not offer a religious or paranormal explanation. In that regard "laying on of hands" is perhaps not the best label since that expression is usually used in the context of religion.

It seems to me that the results indicate a correlation between human attention and the remission of cancer (mammary adenocarcinoma) in mice. The paper notes "the





## Wanted!!

Articles, poetry, Letters to the Editor, suggestions to improve  
Phactum.

Almost all topics are welcome - no partisan politics or  
Kardashians please.

Send submissions to [phactpublicity@aol.com](mailto:phactpublicity@aol.com)

peculiar situation that biology majors were unable to produce remissions in the laboratory but were able to do so at home...it is also possible that systematic intellectual activity (these students kept scientific logs) is antagonistic to the production of healing effects." I would not surmise that intellectual activity is antagonistic to healing but rather observe that students writing in lab notebooks are not paying attention to their mice. How might human attention be of benefit? It's possible (for a start--this by itself doesn't explain much) that the attention is somehow comforting to the mice, which confers some benefit; but I think it's more likely that the attention is stressful to the mice, and causes an increase in stress hormones, which Wikipedia teaches me are hormones such as cortisol, growth hormone, and norepinephrine. Hit number 2 of an appropriately phrased google search turned up <http://cancerres.acrjournals.org/content/12/1/59.full.pdf> --I'll spare you the full citation, it's all there--which reports the effect of growth hormone on the mass of mammary adenocarcinomas in mice. Growth hormone increases tumor mass! So this doesn't explain the JSE results! But it is evidence for the plausibility of a relatively unremarkable, relatively unsurprising explanation for an effect, if even in the "wrong" direction, of interaction with humans on cancer growth in animals.

Howard J. Wilk  
Philadelphia, PA

Editor: Various possible explanations for reported sightings of sea serpents are listed under SEA-SERPENT in *The Encyclopaedia Britannica* of 1888, namely, a "number of por-

poises swimming one behind another", a "flight of sea-fowl", a "large mass of seaweed", a "pair of basking sharks", "Ribbonfish", a "gigantic squid", a "sea-lion" and even a "plesiosaurus, or some other of the huge marine reptiles usually believed to be extinct". Nonetheless, the article also stated "that, while, with very few exceptions, all the so-called 'sea-serpents' can be explained by reference to some well-known animal or other natural object, there is still a residuum sufficient to prevent modern zoologists from denying the possibility that some such creature may after all exist."

Yet another possible explanation is that some resort hotels, e.g., in Cape May, were involved in such reports in order to attract curiosity seekers, e.g., in Philadelphia, who would then fill hotel rooms. Also, some newspapers seem to have printed these sensational tales in order to sell papers. Last July, I visited Cape May and took a dolphin watch boat ride that rounded Cape May Point where I saw about two dozen dolphins. In the past, some honest people surely must have mistaken dolphins traveling in a line for a sea serpent. However, below is an article that appeared in *The Philadelphia Inquirer* for Monday morning, July 22, 1889 which seems to indicate that a famous Cape May resort hotel, Congress Hall, was responsible for creating and propagating a blatantly phony report of a sea serpent off Cape May Point!  
Don Nigroni  
Glenolden, PA

Editor: Re: Skepticism and Africa (Phactum, July/August 2011, p. 10) reminded me that I had read about the plight of albinos in Africa. A search of the New York Times for "albinos" in the last 12 months found "Crowds Come Over Roads and by Helicopters for Tanzanian's Cure-All Potion", 28 March 2011 p. A4; online at:

<http://www.nytimes.com/2011/03/29/world/africa/29potion.html?scp=1&sq=albinos&st=cse>

The article mentions albinos only in passing. Most of the article is about an herbal remedy responsible for the deaths of dozens of people, not from drinking it, but rather "[t]hey died from the long queues". (A little internet sleuthing, which you can do for yourself, discloses that there is some dispute as to what's in it, and that the remedy might have some efficacy against several diseases. I mention this latter point because it is important to point out in any discussion of traditional medicines that some of them do work and that many modern medicines are derived from materials traditionally used as medicines or poisons.)

With regard to albinos, the article states that "[i]n Tanzania, so many people believe, for example, that the body parts of albinos carry good luck, that dozens of albino people have been killed by thugs, who then sell their bones, hair and skin for thousands of dollars." The obvious question is, if the body parts of albinos carry good luck, why don't they protect the albinos?

Howard J. Wilk  
Philadelphia, PA

## SEA SERPENT SURELY

Seen by a Voracious Witness Off  
Cape May Point.

### NARROW ESCAPE AT ATLANTIC CITY

Saved by a Life Guard From Drown-  
ing—Greatest Crowd of the Season  
Yesterday—Hotels Filled to Overflow-  
ing—Bathing and Boating.

SPECIAL TO THE INQUIRER.

CAPE MAY, July 21.—That irrepressible and annual sea-serpent has been seen again, or at least that is what the night watchman of Congress Hall says. He will solemnly affirm on a pile of Webster's and Worcester's a mile high that the other morning he saw the sea-serpent off the pier.

Just after the scrub girls came on at 4 o'clock he took a stroll down to the beach and off on the pier. The great monster had a square black head and was of immense proportions, with flappers, fins and feelers, like a crab's, and a most ugly sight to behold. The serpent, he says, was within one hundred feet of the end of the pier. The sight only lasted five minutes.

Editor's note: The lucky rabbit's foot is not so lucky for the rabbit either.

Editor: I wanted to share with our group that there will be a public debate held at the Philadelphia Free Library (main branch on the Parkway) on **Monday, September 19th at 6:30 p.m.** It is titled "**The Role of Religion in Today's Society**". It will be on the topic of church-state separation between Ed Joyce, President, Delaware Valley Americans United for Separation of Church and State (DVAU) and Dr. Peter Lillback, theologian and president of Westminster Theological Seminary.

This event is free and open to the public, and will be held in the Montgomery Auditorium at the Library.

It seems our intelligent design event with Judge Jones last April wasn't the last word on this quagmire which, to my mind, should not even exist. I read our Constitution as unambiguous on this point and I remain somewhat of a constructionist.

Resolutions to be debated include: "The U.S. is a Christian Nation;" "The words 'Separation of Church & State' do not exist in the Constitution;" "Intelligent Design is a viable alternative to Evolution;" "The Ten Commandments form the basis of U.S. Law;" and "Our secularist society has kicked God out of the classroom and public square." Dr. Lillback will argue the pro-side of these issues, and Ed Joyce will argue the con-side.

Tom Medero  
Philadelphia

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## Various Ruminations

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

### Baruch Blumberg, R.I.P.

I had the good fortune to meet Dr. Baruch Blumberg in March 2011 at an event at the College of Physicians of Philadelphia. At that event, Dr. Paul Offit, a past PhACT speaker,

and a journalist, Seth Moonkin, were discussing vaccines and the many controversies surrounding them. Dr. Blumberg, who was in the audience a few seats away from me, was introduced from the podium. Little did I know or suspect how accomplished a scientist this man was.

Later in the evening, I did get to chat for a few minutes with Dr. Blumberg. At that time I learned that he was president of the American Philosophical Society and we chatted about that and Benjamin Franklin. A few minutes later, chatting with another lecture attendee, I learned that Dr. Blumberg was awarded the Nobel Prize in 1976 for having discovered the virus, the cure, and the vaccine to prevent Hepatitis B.

A month later, on April 5, Dr. Blumberg died. I did not know that fact until having recently explored the SETI website where Dr. David Morrison, Director, Carl Sagan Center for Study of Life in the Universe, SETI Institute wrote an elegant obituary of that extraordinary man.

How fitting and poetic that Dr. Blumberg, a scientist of many dimensions, a Renaissance Man, at the end of his life was the president of the American Philosophical Society, founded by Benjamin Franklin.

Dr. Morrison's remarks can be seen online at:

<http://www.seti.org/page.aspx?pid=1593>

### Whodunit??

PhACT lecturer and member Lewis Mifsud, a Professor of Physics and Electrical Engineering and a Forensics expert, will on Sunday, October 30, 2011 at 2:00 PM at the Penn State University campus, Woodland Building, 1600 Woodland Rd., Abington, PA, address the AAUW, American Association of University Women, Northeastern Montgomery County Branch.

Lewis's topic, "**Whodunit**", will address and explain the fundamentals of fingerprint and DNA analysis. The presentation will demonstrate the odds of a pure chance random encounter of a "match" of a suspect's DNA profile with that of another person from the same/ethnic population, based on genetic markers used by the FBI toward evaluating DNA matches.

Life would have gone much easier for the sailors on the USS Caine if Captain Queeg had Lewis as forensic advisor solving the infamous "Case of the Missing Strawberries".



**"The budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled, and the assistance to foreign lands should be curtailed lest Rome become bankrupt. People must again learn to work, instead of living on public assistance." ~ not Cicero - 55 BC**

**This quotation is frequently misattributed to Cicero in 55 BC but in fact was coined by Taylor Caldwell in her 1965 novel, A Pillar of Iron.**

### Major Medical Advance at University of Pennsylvania

Researchers at the University of Pennsylvania's Abramson Cancer Center have developed a highly promising treatment for chronic lymphocytic leukemia (CLL). In a stage 1 clinical trial, 2 of 3 CLL patients have been in sustained remission and the third has experienced major improvement. The treatment involves removal of the patients T cells, genetically modifying them in Penn's vaccine production facility, then infusing them back into the patient. The desired effect is that the modified cells will proceed to kill cancerous cells.

This therapy seems to have worked rapidly and thoroughly but it remains to be seen how long remission persists and what side effects will emerge. The therapy is very promising however, and Penn researchers are planning similar experimental treatment of other cancers including those of the lung, ovaries, myeloma and melanoma.

This story can be examined in greater detail at the University of Pennsylvania website:

[http://www.uphs.upenn.edu/news/News\\_Releases/2011/08/t-cells/](http://www.uphs.upenn.edu/news/News_Releases/2011/08/t-cells/) and a very technical account of the achievement at the New England Journal of Medicine website: [http://www.nejm.org/doi/full/10.1056/NEJMoa1103849?query=featured\\_home&#t=articleTop](http://www.nejm.org/doi/full/10.1056/NEJMoa1103849?query=featured_home&#t=articleTop).

### Colonial and Civil War Medicine

On page 10 of this Phactum Clarissa Dillon, Ph.D. discusses medicine in an essay **Domestic Medicine in the "World of William Penn"**. Then on October 15, 2011 PhACT's speaker Robert D. Hicks, Ph.D. will present **"Straight and swift to my wounded I go": The Reality of**

**Civil War Medicine and its Interpretation"**, a discussion of American medicine as it was practiced during the Civil War, 150 years after William Penn and 150 years before our time. Dr. Hicks is the curator of the Mutter Museum of the College of Physicians of Philadelphia.

A lot has changed in medicine in those years between William Penn and today and many major medical advances have occurred right here in Philadelphia as is evidence by the preceding story of a new cancer therapy. Think of the spectacular linkages between those Eras separated by a century and a half, and massive changes of technology brought about by science and Critical Thinking.

Think too of the next few stories that illustrate ferocious retrograde medical practices in our modern Epoch. I invite PCC students (and anyone else) to write some essays for Phactum on the various notions of "non-detectable energy healing" and shabby vending of useless homeopathic vaccines claiming to prevent malaria and other diseases.

### Homeopathic pharmacy ordered to stop making unsubstantiated vaccine claims

This item was in Dr. Stephen Barrett's Consumer Health Digest of July 28, 2011.

*The British Advertising Standards Authority has ordered the Ainsworths Homeopathic Pharmacy to stop claiming that its homeopathic travel kit can protect against diseases such as typhoid, diphtheria, tetanus, polio, yellow fever, meningitis, Japanese encephalitis, tick-borne encephalitis, dengue fever, and malaria and that homeopathic products offer an effective alternative to standard immunization. The ASA's decision is posted to:*

<http://www.casewatch.org/foreign/asa/ainsworths.shtml>

### Ernst blasts NCCAM-funded research

Also, from Dr. Barrett's newsletter of July 28, 2011:

*Edzard Ernst, M.D., Ph.D. and colleagues have sharply criticized NCCAM-funded research into herbs, chiropractic manipulation, and "energy medicine." In each case they examined the outcomes and experimental design of the relevant randomized, controlled trials. They concluded:*

*\*\*Twenty-seven studies had looked at herbal substances. Nearly all were poorly designed and/or improperly reported. Only 4 had found a positive result, but the NCCAM Web site continued to promote some of the substances despite negative research findings. [Ernst E and others. NCCAM-funded RCTs of herbal medicines: An independent, critical assessment. Verlag Perfusion GmbH 24:89-102, 2011]*

*\*\*Ten studies had tested chiropractic spinal manipulation. Only one had a positive outcome, and all of the studies were poorly designed and/or improperly reported. Because the fundamental concepts of chiropractic are biologically implausible, they recommended that (a) future studies be funded by the chiropractic profession rather than U.S. taxpayers, (b) investigations should aim to test the plausibility of chiropractic's main principles, and (c) measures be taken to ensure that the studies are conducted properly. [Ernst E,*

**Dr. William Fisher Norris (1839 - 1901)**



is shown top center with his medical staff at Douglas Hospital in Washington, D.C. (1864). Dr. Norris was a Philadelphia doctor and a fellow of the College of Physicians of Philadelphia. He was an ophthalmologist and served in field hospitals at Gettysberg.

Posadzki P. An independent review of NCCAM-funded studies of chiropractic. *Clinical Rheumatology* 30:593-600, 2011] <http://www.ncbi.nlm.nih.gov/pubmed/21207089>

**\*\*Five studies were related to "energy medicine." The modalities included reiki, qigong, distant healing, and Johrei healing. Three of the studies reported beneficial effects, but these studies were poorly designed and therefore untrustworthy. The two studies that were well-designed failed to demonstrate effects from "energy" in healing. ("Energy medicine" is based on the notion that various healers can exert beneficial effects by manipulating nonmeasurable "energy fields. The Jyorei Web site describes Jyorei as "a healing art that uses divine light to dissolve the spiritual impurities that are the source of all physical, emotional, and personal problems.") [Seip RJ, Ernst E. An independent review of studies of 'energy medicine' funded by the US National Center for Complementary and Alternative Medicine. *Focus on Alternative and Complementary Therapies* 16:106-109, 2011]**

<http://onlinelibrary.wiley.com/doi/10.1111/j.2042-7166.2011.01085.x/abstract>

Ernst and his colleagues want NCCAM to stop funding poor-quality studies of implausible practices and to provide consumers with clear and reliable information based on clinical trials of good methodological quality. Dr. Stephen Barrett, who characterizes NCCAM a cancer of the medical educational system, wants NCCAM to stop pretending that implausible practices might be useful and stop funding educational programs (in medical schools and elsewhere) that make the same pretense. [Barrett S. NCCAM studies of "energy medicine" are a waste of money. *NCCAM Watch*, July 28, 2011]

<http://www.nccamwatch.org/research/energy.shtml>

### Aliens May Destroy Humanity

The Guardian, a major British newspaper, reported that scientists at NASA and Pennsylvania State University have cooperatively produced a speculative paper about the possible consequences of our planet being discovered by an intelligent, space traveling, extraterrestrial civilization.

One can only hope that this document was produced on April 1 at a friendly pub, that no research money was expended, and that the aliens who actually live in the hollow core of the Earth do not come to the surface.

The Guardian article may be found at:

<http://www.guardian.co.uk/science/2011/aug/18/aliens-destroy-humanity-protect-civilisations>

Alas, the collaborative report is too extensive to have been penned on a bar napkin and may be found at:

<http://arxiv.org/ftp/arxiv/papers/1104/1104.4462.pdf>

### DARPA: The Search For Intelligent Life Comes Up Short

Dr. Robert Park, in his weekly newsletter of August 19, 2011 seems to be a bit skeptical about prospects of traveling to another star. The prospects are dim. Unfortunately this is not new knowledge but rather sadly tax money is being used to rehash a preposterous proposition of Interstellar Travel. One wonders if the stated project is actually what project planners actually have in mind.

According to Dennis Overbye in Thursday's NY Times [August 18, 2011], the Defense Advanced Research Projects Agency is planning to award \$500,000 for a study of what it would take to travel to another star. Actually, my class of freshman physics-majors did that study last year, and decided they can't really go there for any price. A reality-based study of interstellar travel would devastate the science-fiction industry. The good news is that the *Alpha Centaurians* can't, come here. So why is DARPA doing this? What we should be talking about is not visiting extra-solar planets, but what

can be learned about them without going there. Although we can't travel at the speed of light, information does all the time. We can't travel to other stars, but we see what's there. We can conceive of telescopes many orders of magnitude more powerful than the JWST will be, if we ever build the JWST. Telescopes don't make money, so why would we bother? Maybe it could be sold to reality television.

### Mystery Planet Nibiru

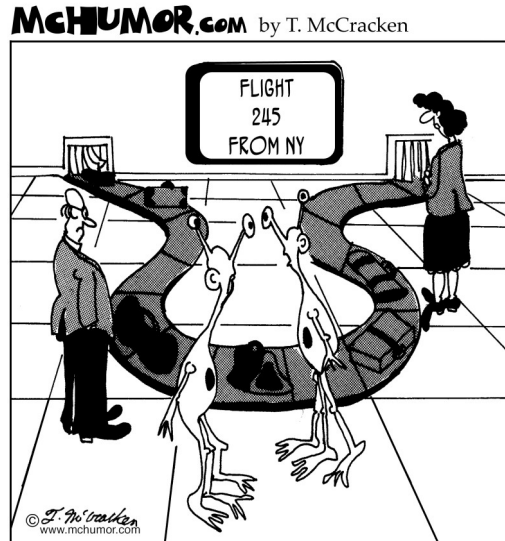
While DARPA gets financial aid and SETI scans the skies, **The Church of Critical Thinking** has concluded that Mystery Planet Nibiru, also known as Planet X, will approach Planet Earth in 2012. No kidding. And it must be true since Mayan, Egyptian, Tibetan, Cherokee, Hopi, Hindu, Aztec, Dogon, Zulu, and Maori prophecy all predict 2012 as the year of a catastrophe such as **The Flood** which was caused by the approach of Nibiru 4,200 years ago.

We can expect Nibiru every 4,200 years if Church of Critical Thinking calculations are correct. And 2012 is the Big Year ... for us.

<http://churchofcriticalthinking.org/planetx.html>

### Gambling Notes

♥ **Lawmaker wants to make underage gambling acriminal offense** - A state lawmaker wants to punish underage gamblers. Currently, if you are under 21 and are



"Oh great. Our luggage has been sent to Alpha Centauri."

Cartoon by T. McCracken  
<http://www.mchumor.com/>  
Used by Permission

caught gambling, you're asked to leave and the casino is fined. But Democratic State Representative Paul Costa of Allegheny County (Pennsylvania) said that's not enough. He's introduced legislation that would make underage gambling a criminal offense.

<http://www.abc27.com/story/15163277/lawmaker-wants-to-make-underage-gambling-a-criminal-offense>

♥ **Why do some people become addicts?** - Addiction is naturally associated with drink and drugs, but that is not the whole story. The NHS points out that people can "become addicted to anything, from gambling to chocolate". Addiction has to start with exposure, and at some point casual use shifts to dependence. Drugs directly feed the reward circuitry of the brain, and even in cases such as gambling the brain can learn to look forward to the thrill. The brain adapts to the drug, becomes tolerant to it and demands more each time. Physiological dependence - addiction - emerges

<http://www.bbc.co.uk/news/health-14273938>

♥ The real effects of gambling - Howard Shaffer, an associate professor of psychiatry at Harvard Medical School says fear stems from the assumption that demand inexorably rises to match supply - that each new gambling site increases the

number of people who gamble and the amount of money they bet. That, we have learned, is not quite how human beings respond. "The current available evidence," they found, "suggests that the rate of PG (pathological gambling) has remained relatively stable during the past 35 years despite an unprecedented increase in opportunities and access to gambling." (Research work at Harvard is funded by the gambling Industry)

<http://www.chicagotribune.com/news/columnists/ct-oped-0721-chapman-20110721,0,1070338.column>

♥ Why the New Definition of Addiction, as "Brain Disease," Falls Short - Follow in from yesterdays story (Addiction is a disease) - if you want to reduce stigma, calling something a brain disease may not be the best way to go. Studies that have looked at this question have found that labeling a disorder as "neurobiological" tends to have either no effect on stigma or actually increases it. The problem may be that people think of "brain diseases" as fixed and unchangeable.

<http://healthland.time.com/2011/08/16/why-the-new-definition-of-addiction-as-brain-disease-falls-short>

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## Adult Education Course Schedule Fall 2011 Courses

**Courses are Free and Open to the Public**

[http://www.wagnerfreeinstitute.org/edu\\_adult](http://www.wagnerfreeinstitute.org/edu_adult)

**Adventures with our Ancestors: The Relationship of Neandertals to Modern Humans**, Professor Janet Monge. 7 Mondays, October 3 - November 14, 2011, 6:30 to 8:00 PM. University of Pennsylvania Museum of Archaeology and Anthropology, 33rd and Spruce Streets. This course will explore human evolution and the evidence for a relationship between Neandertals and modern humans. The class includes a visit to the newly installed human evolution exhibit at the Penn Museum.

**No preregistration required.**

**Science, Art, and Fashion during the Golden Age of French Natural History, 1790-1830**, Professors Sylwester Ratowt and Jane E. Boyd. 7 Wednesdays, October 5 - November 16, 2011, 6:30 to 8:00 PM. American Philosophical Society Museum, 104 S. 5th Street (next to Independence Hall). This course is based on the ideas explored in the exhibit "Of Elephants & Roses: Encounters with French Natural History, 1790-1830," currently on display at the American Philosophical Society Museum. The exhibit will be open for viewing prior to each class.

**No preregistration required.**

**Birds and Birding in the Delaware Valley**, Professor Clifford Hence. 6 Wednesdays, October 5 - November 9, 2011, 6:30 to 7:45 PM. Independence Branch of the Free Library, 18 S. 7th Street (between Market and Chestnut). This course will look at the unique anatomy of birds and provide a framework for recognizing bird species through visual identification and by their songs and calls.

**No preregistration required.**



## Flanagan on Lexington

by Albert Fried-Cassorla

*(On seeing the Tommy Flanagan Trio at the Jazz Standard,  
27th Street, Manhattan, January 2, 2000)*

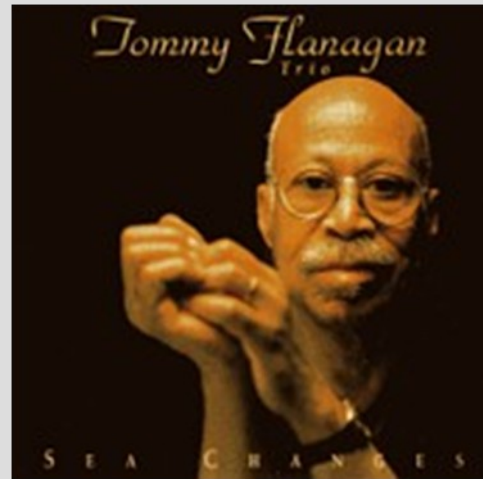
Here's how it wuz...  
Why write? ..Cuz...  
Walking towards Flanagan, that mythical jazz pianist trippin' on  
the  
Manhattan crust.

Zippin' with my son past everyone down old B-way,  
Going our way, with the Pakistans, Uzbekistans, and all stripes  
of fellow ameriKANs...  
headed to the east side, passing at 44th below the Concorde  
hanging model, angled like a forlorn seabird,  
Below great Northern Lights of giant cinemas in the sky...  
Down the tube to the Times Square shuttle, on the fly...  
    Watch your step!  
Hop the gap between platform and car, two stops later and there we are --  
not far.

Jazz Standard, club cool and dimly lit...  
Peter Washington on bass, now thumbing it, fingering the everlasting soft-hand-rhythm...  
Flanagan, smooth, bald, avuncular Afro dude, ancient avatar so humbly smooth...  
Lyrical as a Parisian streetlamp by the mist-enshrouded Seine,  
making melodious sense  
Painted backdrop of 12-inch scratched glass squares, setting the scene as if by unawares.  
Now 2 tunes by Bud Powell --  
and then Giuseppe Verde's "Body and Soul "

o, didn't you know? - that's johnny green, in his lyrical mode. note by plangent note, in thoughtful mode, until  
playful fast-paced melody ...

A tune from Gershwin's ""Girl Crazy" and Tommy asks...  
what else is there is go crazy about?....  
A woman in the throng meets the task - "Boy Crazy," she avers  
Right on, the ladies infer  
Capper now by dizzy g. , dontcha see.... where tommy rolls on spiritedly,  
Louis Nash drums hand-rappingly,  
fingers on skin, so seamlessly  
Uplifted, powered we feel, by this night's Flan-Energy



*Albert Fried-Cassorla is a teacher for the School District of Philadelphia, is a philosopher, playwright, poet, and in 1999 was a finalist in the Montgomery County (PA) Poet Laureate's Contest.*

Thank you, Albert.  
Phactum readers are invited to submit original poetry.

# Domestic Medicine in the "World of William Penn"

By Clarissa F. Dillon, Ph.D.



## Domestic Medicine in the "World of William Penn"

The Bicentennial marked an important watershed in the interpretation of American colonial history. Before 1976, the emphasis was on the rich and famous, mostly white. Protestant, and male--usually wealthy and important. In histories of medicine, development of the profession was presented. Lay practitioners were treated with contempt.

*...a great many people gave medical advice and prescribed drugs. Such practitioners fell roughly into three categories. There were the physicians who had acquired a long formal medical education; there were apothecaries, less well educated, who had learned by apprenticeship and practical experience; and there were laymen who had done neither. For example, innumerable ladies of the manor, squires' or ministers' wives, went around trying to help the sick. Some were well motivated, with fine humanitarian impulses, others were officious busybodies who enjoyed imposing their will and their remedies on hapless parishioners. These well-meaning people knew little, and their practice was the crudest, but at least there was no financial gain involved. On the other hand there were many--women and men alike--who made a good living from this irregular medical practice.<sup>1</sup>*

This was a patronising interpretation of material to be found in 17th- and 18th century sources, like herbals.

*...[growing herbs] to preserue health, and helpe to cure such small diseases as are often within the compasse of the Gentlewomens skils, who, to helpe their owne family, and their poore neighbours that are farre remote from Physitians and Chirurgions, take much paines both to doe good vnto then,...<sup>2</sup>*

Although only men with a formal education could belong to British medical societies like the Royal College of Physicians in London, tradition and common practice placed medi-

cal activities within the sphere of women's work.

*...one of the most principal virtues which doth belong to our English housewife; ...sith the preservation and care of the family touching their health and soundness of body consisteth most in her diligence, it is meet that she have a physical kind of knowledge; how to administer many wholesome receipts or medicines for the good of their health, as well as to prevent the first occasion of sickness as to take away the effects and evil of the same when it hath made seizure on the body.<sup>3</sup>*

This author does go on to say, "...we must confess that the depth and secrets of this most excellent art of physic is far beyond the capacity of the most skilful woman, as lodging only in the breast of the learned professors;..."<sup>4</sup> He saw distinct groups at work, unlike the 20th-century writer who lumped them all together:

*Licensed physicians, well-intentioned but unlicensed practitioners, and the sheerest quacks all dabbled in strange remedies ... when reputable men were glad to pick up prescriptions from old wives or mechanics ...it was most difficult to distinguish scientist from charleton.<sup>5</sup>*

Instructional materials for women's work were more discriminating. A late 17th century book included a section entitled "The Physical Cabinet: Containing Excellent Receipts in Physick and Chirurgery, for Curing most Diseases Incident to the Body."<sup>6</sup> It had receipts for preparing medicines to treat minor problems like flatulence (p. 145), a dry cough (p. 135), and headache (p. 130) as well as for serious conditions and diseases, such as jaundice (p. 131), deafness (p. 149), and the falling sickness (p. 134; p. 145).

Household books for women became more available during the 18th century. Many of the English publications were imported for use in North American colonies. In 1738 Benjamin Franklin offered The Compleat Housewife for sale.<sup>7</sup>



*Reason he knew why other Doctors did not use it was because it was sold not at the Druggists but the Grocers.*<sup>12</sup>

In addition to instructions for diagnosing and treating people of all ages, this household book also contained a great deal of material classified today as veterinary medicine. So does a local manuscript.<sup>13</sup>

Women kept household receipts from family, friends, and other sources. There is a valuable example, possibly prepared as an instructional manual for a member of the younger generation, in a Philadelphia collection.<sup>14</sup> Here are examples of the author's opinions.

*To Cure Ring Worms & Sore hands  
...the wife of Edward. Williams of the Grate vally had a humour all over her hands Like verry Bad Ringworms which Lasted Several years & was So Sore that She was allmost unfitt for any Business & had aployed to Doctors but found no Releife I advised... (p. 4)*

*For Bleeding at the Nose  
...her Life was Despaired of & Could Gett no Releife from the Doc-tors but was .. advised by a man who had Treasurd up many vallu-able Receipts... (p. 12)*

*For Being Poisoned with the Poison Vine  
... by the Doctors advise Oynted with house Leek & Cream which Did no Good for he Swelld till he was blind... (p. 18)*

*For the Bilious Chollick  
...Expecting him to Expire Imediately at Last the Doctor Confest he Could try but one medicine more which would be the Last & Imediately Gave him a Glass or two of Common Sea water out of the Ocean which gave him Ease in a quarter of an hour the Doctor knew the Secret & was thought hard of for not Giving him it Sooner... (p. 7)*

*For a Violent Costiveness  
...Could find no Releife from Doctors at Last was advised by an ancient woman... (p. 20)*

*For a white Swelling  
...the Doctor advised her to have Cutt out Butt. She would not both for fear of the pain & Charge Be- ing in Low Circumstances & was advised By Ludowick Christian Sprogel's wife to apply Pilgram Salve to it... (p. 21)*

*For a Violent Pain in the Head  
...the Doctor Tryed all manner of means to Ease Her: But Gave her No Releife: at Last he Concluded it to be a Rhumatick pain & Incurable & Confest Could Do no more for her: I had Long Insisted on a hot bath for her head which She Dispised & Said She had acquainted the Doctor whose Opinion was it was but a Trifling Medicine & Could not Reach the Cause of her pain Butt at Last being Discour- aged by the Doctor Saying he Could Do no more & I still Insisting on the bath... (p. 16)*

Physicians' advice was taken, when it seemed advisable.

### *The true Daffy's Elixir.*

**THE** popular medicine sold under this name is differently made by different venders. The following, however, is considered as the genuine receipt for making it.—Take five ounces of aniseeds, three ounces of fennel-seeds, four ounces of parsley-seeds, six ounces of Spanish liquorice, five ounces of senna, one ounce of rhubarb, three ounces of elecampano-root, seven ounces of jalap, twenty-one drachms of saffron, six ounces of manna, two pounds of raisins, a quarter of an ounce of cochineal, and two gallons of brandy. Stone the raisins, slice the roots, and bruise the jalap. Then mix the whole together; and, after letting them stand close covered for fifteen days, strain out the elixir. So favourite a remedy has Daffy's elixir been for all colicky pains, during the last hundred years, that many families have been enriched by its preparation and sale; a few of whom there is reason to believe, have used not half the ingredients above enumerated. The cheap stuff, commonly sold as Daffy's elixir, is little more than an infusion of aniseeds, liquorice, and jalap, in the coarsest and most fiery malt spirit, lowered with common water.



A home recipe for the True Daffy's Elixir, from William Augustus Henderson *Modern Domestic Cookery and Useful Receipt Book*, New York, 1829.

*...the advice of Doctor John Kearsly Sen' it Cured me in a Days time... (p. 9)*

*...then by the Doctors Order Boyld a Stiff Pultice... (p. 14)*

*...Doctor Deemer Gave his advice ...Immediately after it was Laid on the Back of her Neck the Bleeding Stopt. (p. 22)*

There are diary entries from another woman that substantiate claims of ability in the restoration of health. Elizabeth Drinker, wife of a prominent 18th century Philadelphia merchant, considered herself at least the equal of the physicians she consulted from time to time. In diagnosis and treatment, she recorded her own opinions and actions. Here are two important "case histories." On 9 October 1793 she sprained her ankle and was carried home: *"I had it bath'd with Opodeldock and wrap'd up in flannel,..."* (p. 516) The ankle was so painful she could not stand. On 11 October: *"I show'd my foot this morning to Doctr. Lushy who desir'd me to chang [sic] my method of heating it, which was vinegar and opodeldock, and afterwards I bath'd it with Oyl of St. Johns-Wort, but he ordered lead water alone, twice a day."* (p. 516) She also accepted help from a neighbor: *"...Nancy Livezly brought me some sweet marjoram to make a bath for my foot,..."* (p. 523) This woman returned on 29 October with another treatment: *"...widdow Livealy here this morning ... kindly apply'd a plaster of Rosin and Lard to my foot,..."* (p. 523) Another physician, Dr Shippen, was asked *"...to look at my poor foot, as it makes still a disagreeable appearance, he was not at home. I have not seen him...."* (p. 523) On 7 November, she was able to walk across the room without shoes. She still complained of swelling and a very slow recovery on 25 November; on 2 December *"...I cannot yet walk but little having my Sons shoe on--..."* (p. 532)

In the other case, she nursed her adult daughter who was suffering what was first called "a Cold." (607) Nancy's condition worsened; on 20 October 1794, *"...she is much oppress'd by the Cough &c--spits a little blood, is feverish and lost appetite,--..."* (p. 607) Her mother sent for Dr Kuhn on 21 October: *"...he orders her loosing 10 oz blood as soon as may be;--..."* (p. 608) However, because Nancy was no longer spitting blood, ED *"...did not send for Justis Fox to bleed her as I intended, she is very sick, can scarcerly hold up her head without reaching, her skin is yallow and a very feverish heavy smell about ... complain of a pain in her back..."* (p. 608) Her mother wanted Dr Kuhn to come because she *"...continues very sick, can take no sustinance, and is very Yallow. I think 'tis the Jaundice she has taken, John is but lately releiv'd from it, 'tho I don't know that it is infectious .... Dr. Kuhn came after dinner, said Nancys disorder was bilious and ordre'd spic'd Rhubarb, said he would come again tomorrow. Nancy took a dish Coffee and piece dry toast, more than for several days past,--..."* (p. 608)

The next day, Nancy took *"...the Rhubarb and spice reguarly all day, and twice &c, to no purpose as yet, the obstruction, I fear, is very obstinate--..."* (p. 609) When the doctor came, *"...he order'd pills, Calomel &c to be given every two hours 'till they operated....Nancy very sick this evening brought up the pills that she had so long taken, disolved, I was much at a loss how to act, as the obstruction had not given way, and she could take no more, was too sick, had taken 9 at 3 doses--...she was too ill for me to leave her."* (p. 610) There was no improvement.

*...the Doctor order'd castor Oyl, one dose of which she took, but could bare no more, a little while after a large discharge of green boil was evacuated, a very dark green, it lay so long in the bowels, the Doctor said ... it was occasioned by the pills, the discharge I mean, at 12 gave by his desire 10 drops laudanum, repeated it 2 or 3 doses Daffys Ellixer in coarse of the day, all to no purpose, brought up most that she took, she was very ill most of the evening, with hard and continua reachings, distressing sensation in her throat and stomach, 2 or 3 active medicines were administered to day, without effect, at 9 at night, too much spent, and very averse to take the powders the Doctor had order'd in case the other medicines fail'd, and as she now lays still, I am loath to urge or disturb her--...(p. 611)*

There was still no improvement.

*...the Doctor had sent several sorts medicine, that if one fail'd the other was to be try'd...he ord'r'd, if no change took place for the better, to lay a blister on her Stomach, said if what he had order'd did not succeed he could do no more, if the pills did not answer she was to take powders of Jalap, if they would not stay on her stomach, Senna was to be given in an infusion, if the sickness continu'd and the obstruction did not give way, the blister was to be apply'd--William was for the calomel pills, which she had taken off before; JS. for the powders, she would take neither, but agreed to take the Senna, of which she took 4 doses, about 11 at night it operated, from one 'till near 4 she lay still, and dos'd a little ... she discharg'd a quantity of dark mucus, felt cold, with pains about her. I gave her a tea cup of Chicken broath, instead of a dose of Senna, find myself at a loss whether to continue or omitt it, Nancy chose the latter,.... (pp. 611-612)*

This evidently marked the turning point; during the rest of the month there were improvements in Nancy's condition. Her recovery was slow but apparently steady and by 4 November, *"...she is finely recoverd, for the time,..."* (p. 614) This was not quite the end of this saga. On 24 December, ED set down her ideas.

*...I have been led to think, I may say to conclude, on reading Doctr. Rush's account of the Yellow fever, that my daughter Nancy had it towards the later end of October last, at Clearfield--and do suppose that Doctr. Kuhn, who attended her, knowing that would steadily attend her, be it what it would, kindly endeavoured to conceal it from us--he say'd it was the Jaundice and some thing of the fall fever--it is possible it may be so but as it has pleas'd kind providence to restore her, I intend at a suitable opportunity to tell the Doctor my opinion of the matter, and I have no doubt of his candour on the occasion.--I suspected it while nurseing her by many of the symptoms, and finding many others in Dr. R.s book, seems a confirmation. (p. 633)*

In March 1795, she had that opportunity: "*...I ask'd Doctr. K[uhn]-- the other day, if it was not the Yellow fever that Nancy had last fall, he answer'd in the negative. Notwithstanding all my conjectures.*" (p. 658) She doesn't sound convinced.

From sources like these, it is clear that 18th-century women in Philadelphia were functioning as physicians and as apothecaries, not merely as nurses. Their work, whether it was successful or not, should be included in histories right along with that of the licensed professionals.

## Endnotes

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About the author

**Clarissa F. Dillon** is an independent scholar with a doctorate in History from Bryn Mawr College. Her dissertation discussed 18th-century kitchen gardens in southeastern Pennsylvania, the uses of the plants, and their place in women's work. Her research involved both the traditional archival kind as well as replication--doing their work their way to the greatest extent possible. She has been involved in "living history" since 1973 and shares the results of her investigations into women's lives and domestic processes through demonstrations, programs, and self-published materials.

Ω Ω Ω

## The Statutes at Large of Pennsylvania 1684

### Chapter 162

#### LAW ABOUT THE PRICE OF BEER

**Chap: 162 That if anie person shall Sell any Strong Beer, made of barley mault, above the rate of Three pence a full Wine Chester quart, & all beer or drink made of molasses, above One penny a Quart, botled or Unbotled, mixt or Unmixt, Sweetened or Unsweetened, and he Lawfully Convicted thereof within Ten days after the fact Committed, Before any one Justice of the Peace, by the Testimony of Two Wittnesses, the parties Confession, or by the View & hearing of the Justice of the peace, shall for every Such Offence forfeit five shillings a Quart, and so proportionably, for evry greater or Leaner measure ... vid: Chap. 3'dd.**

**Confirmed by Chapter 175, 1685; chapter 166, 1688; and chapter 191, 1690. Chapter 162 amended chapter 33, Abrogated in 1693.**

## Colonial Beer making Demonstrations

Dr. Dillon will demonstrate the Colonial method of brewing molasses-bran small beer this fall at the Mill at Anselma and at Pottsgrove Mansion. Unfortunately visitors will not be permitted to sample the brew.

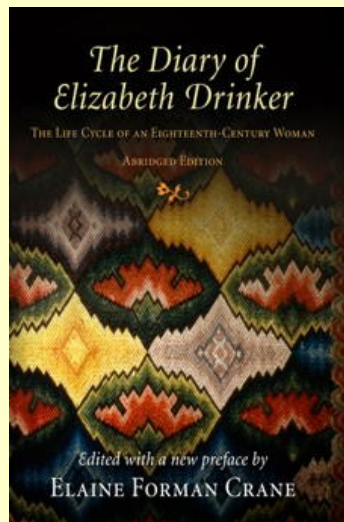
**Sunday, October 16, 2011 — 1pm-4pm** at the Mill at Anselma, 1730 Conestoga Road, PO Box 42, Chester Springs, PA 19425

### Harvest Festival: Brewing Beer in Colonial Days

The art of crafting beer has improved a great deal over the years, but nothing beats a colonial brew! Foodways historian **Clarissa Dillon** will discuss the art of colonial brewing. A must-see for any home brewing enthusiast! <http://www.anselmamill.org/>

**Saturday, November 5, 2011— 11:00 to 3:00 PM** at Pottsgrove Manor, 100 West King Street, Pottstown, PA 19464  
**Demonstration—“...the common Family Way of Brewing”**

Brewing beers of various strengths was often part of the colonial housewife's responsibilities. Her aim was to produce healthful, palatable drinks to suit the size and needs of her family. In this program, food historian **Dr. Clarissa F.**



## The Diary of Elizabeth Drinker

### The Life Cycle of an Eighteenth-Century Woman

Edited by Elaine Forman Crane

**Abridged Edition, 352 pages, Publisher: University of Pennsylvania Press**  
**Paperback 2010 | ISBN 978-0-8122-2077-3 \$22.50**

"[Drinker's] diary, which spans the years 1758 to 1807, is the most substantial woman's diary that survives from eighteenth-century America; and it ranks with the diaries of Samuel Sewall, William Byrd, Landon Carter, John Adams, and William Bentley in its richness as a source for understanding the social and cultural history of the period it covers."—*American Historical Review*

The journal of Philadelphia Quaker Elizabeth Sandwith Drinker (1735-1807) is perhaps the single most significant personal record of eighteenth-century life in America from a woman's perspective. Drinker wrote in her diary nearly continuously between 1758 and 1807, from two years before her marriage to the night before her last illness. The extraordinary span and sustained quality of the journal make it a rewarding document for a multitude of historical purposes. One of the most prolific early American diarists—her journal runs to thirty-six manuscript volumes—Elizabeth Drinker saw English colonies evolve into the American nation while Drinker herself changed from a young unmarried woman into a wife, mother, and grandmother. Her journal entries touch on every contemporary subject political, personal, and familial.

Focusing on different stages of Drinker's personal development within the domestic context, this abridged edition highlights four critical phases of her life cycle: youth and courtship, wife and mother, middle age in years of crisis, and grandmother and family elder. There is little that escaped Elizabeth Drinker's quill, and her diary is a delight not only for the information it contains but also for the way in which she conveys her world across the centuries.

**Elaine Forman Crane** is Professor of History at Fordham University. She is the author of *Killed Strangely: The Death of Rebecca Cornell* and editor of the journal *Early American Studies*, the latter also available from the University of Pennsylvania Press.

## Movement of Hurricanes

(Pennsylvania Gazette)

To Jared Eliot

Dear Sir Philada. Feb. 13. 1749,50

You desire to know my Thoughts about the N.E. Storms beginning to Leeward. Some Years since there was an Eclipse of the Moon at 9 in the Evening, which I intended to observe, but before 8 a Storm blew up at N E. and continued violent all Night and all next Day, the Sky thick clouded, dark and rainy, so that neither Moon nor Stars could be seen. The Storm did a great deal of Damage all along the Coast, for we had Accounts of it in the News Papers from Boston, Newport, New York, Maryland and Virginia. But what surpriz'd me, was to find in the Boston Newspapers an Account of an Observation of that Eclipse made there: For I thought, as the Storm came from the N E. it must have begun sooner at Boston than with us, and consequently have prevented such Observation. I wrote to my Brother about it, and he inform'd me, that the Eclipse was over there, an hour before the Storm began. Since which I have made Enquiries from time to time of Travellers, and of my Correspondents N Eastward and S. Westward, and observ'd the Accounts in the Newspapers from N England, N York, Maryland, Virginia and South Carolina, and I find it to be a constant Fact, that N East Storms begin to Leeward; and are often more violent there than farther to Windward. Thus the last October Storm, which with you was on the 8th. began on the 7th in Virginia and N Carolina, and was most violent there. As to the Reason of this, I can only give you my Conjectures. Suppose a great Tract of Country, Land and Sea, to wit Florida and the Bay of Mexico, to have clear Weather for several Days, and to be heated by the Sun and its Air thereby exceedingly rarified; Suppose the Country North Eastward, as Pensilvania, New England, Nova Scotia, Newfoundland, &c. to be at the same time cover'd with Clouds, and its Air chill'd and condens'd. The rarified Air being lighter must rise, and the Dense Air next to it will press into its Place; that will be follow'd by the next denser Air, that by the next, and so on. Thus when I have a Fire in my Chimney, there is a Current of Air constantly flowing from the Door to the Chimney: but the beginning of the Motion was at the Chimney, where the Air being rarified by the Fire, rising, its Place was supply'd by the cooler Air that was next to it, and the Place of that by the next, and so on to the Door. So the Water in a long Sluice or Mill Race, being stop'd by a Gate, is at Rest like the Air in a Calm; but as soon as you open the Gate at one End to let it out, the Water next the Gate begins first to move, that which is next to it follows; and so tho' the Water proceeds forward to the Gate, the Motion which began there runs backwards, if one may so speak, to the upper End of the Race, where the Water is last in Motion. We have on this Continent a long Ridge of Mountains running from N East to S. West; and the Coast runs the same Course. These may, perhaps, contribute towards the Direction of the winds or at least influence them in some Degree, [ ]. If these Conjectures do not satisfy you, I wish to have yours on the Subject.

I doubt not but those Mountains which you mention contain valuable mines which Time will discover. I know of but one valuable Mine in this country which is that of Schuyler's in the Jerseys. This yields good Copper, and has turn'd out vast Wealth to the Owners. I was at it last Fall; but they were not then at Work; the Water is grown too hard for them; and they waited for a Fire Engine from England to drain their Pits; I suppose they will have that at Work next Summer; it costs them pounds 1000 Sterling.

Col. John Schuyler, one of the Owners, has a Deer Park 5 Miles round, fenc'd with Cedar Logs, 5 Logs high, with chocks of Wood between; it contains variety of Land high and Low, woodland and clear. There are a great many Deer in it; and he expects in a few Years to be able to kill 200 head a Year, which will be a profitable Thing. He has likewise 600 Acres of Meadow, all within Bank. The Mine is not far from Passaic Falls, which I went also to see. They are very curious: the Water falls 70 foot perpendicular, as we were told; but we had nothing to measure with. It gives me great Pleasure that your Sentiments are in accord with mine. I like your Notion [ ]ing; and tho' perhaps it [ ]n prudent, as we are circumstanced [ ] them in the Proposals; I doubt not that they will in time become Part of the [ ]. It will be agreable to you to hear, and therefore I inform you, that our Subscription goes on with great Success, and we suppose will exceed pounds 5000 of our Currency: We have bought for the Academy, the House that was built for Itinerant Preaching, which stands on a large Lot of Ground capable of receiving more Buildings to lodge the Scholars, if it should come to be a regular Colledge. The House is 100 foot long and 70 wide, built of Brick; very strong; and sufficiently high for three lofty Stories: I suppose it did not cost less than pounds 2000 building; but we bought it for pounds 775 18s. II 3/4d: tho' it will cost us 3 or perhaps 400 more to make the Partitions and Floors, and fit up the Rooms. I send you enclos'd a Copy of our present Constitutions; but we expect a Charter from our Proprietaries this Summer, when they may probly receive considerable Alterations. The Paper admonishes me that 'tis Time to conclude.

I am, Sir, Your obliged humble Servant





## Critique by Paul Schlueter III of Thomas Medero's essay "Has SETI Lost Its Compass", Phactum July/August 2011

Let me begin with appreciation for Thomas M. Medero's cover essay about SETI. I am pleased to: see his interest and passion translated into written material which he has shared with us. Though I will rebut some of his work below, I hope it will not be taken as criticism or discouragement, but rather as encouragement to become more adept at the skills of critical writing.

Medero states SETI's goal in his second paragraph: it was set up as "what was needed to hear from other life forms "out there." The key here is that SETI is a passive receiver system, listening/observing for evidence which MIGHT be discernible from among the stars.

Then, in paragraph ("par.") 4, Medero turns that around; "a shot in the dark," "directly hitting a target," and "scoring a hole-in-one" are all metaphors implying that we're projecting, or sending, something out to the heavens. SETI does in fact "aim" radiotelescopes, but it's an act of focusing the reception, not one of firing or sending messages.

Also in par. 4, Medero says "We are making a rather huge baseless assumption that they are using something compatible with our primitive communications technology."

The point is technically correct, but misses the big picture. SETI listens by using the most advanced, most sensitive devices available to them, BECAUSE that's what's available for listening! We do actually know how dolphins communicate (by sounds, and perhaps to a lesser extent by body language); we just haven't learned to translate what they're saying... Yet. As for aliens, we "listen" for them within the electromagnetic spectrum, hoping to find something which we can distinguish as an artificial signal (as opposed to naturally occurring signals, which are everywhere.)

Here we come to Medero's largest error; in par. 5, Medero substitutes the SETI hypothesis with one of his own creation, which he then hopes will make his point for him (this is called a "straw man argument".) The SETI hypothesis is NOT that "there must be intelligent life forms other than our own," but rather something much less

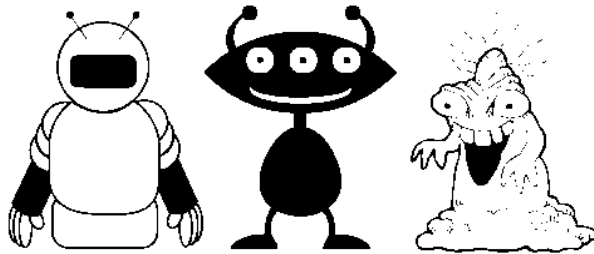
arrogant or insistent. SETI's base hypothesis is that, IF there are other life forms, and IF they are intelligent, and IF they are technological (dolphins are a good example of intelligence that pursues little or no technology), and IF they happen to be broadcasting signals within the electromagnetic spectrum, (here it comes...) THEN maybe we can detect some evidence to indicate the truth of all of the above. Hypothesis stated. Now, how can we test the hypothesis? By LISTENING for whatever we can find which might suggest that it originates with intelligence. First, we use our best receivers (done); second, we scan the skies to improve the chances of happening onto a signal which would be likely to be quite weak (done); third, we analyze what we receive to see if anything we would recognize as intelligence-based is present (unsuccessful, so far).

How would we recognize "intelligence?" Many methods have been proposed, but they all boil down to asking how WE might send a message, if we wanted to. A simple solution is to send pulses that "count" (x...xx...xxx...xxxx ...xxxxx, and so on). Another is to

broadcast an artificial waveform which might be recognizable (a decent square wave is remarkably difficult to achieve, and does not appear to exist in nature). Another might be to broadcast what we'd consider to be an "universal constant" (pi, the ratio of a circle's diameter to its circumference, is going to be the same in any culture aware of that geometric form's characteristics). The Pythagorean theorem is another such example.

If we were to receive any signal which held such mathematical or physical significance, and if we could rule out the chance that it was merely a reflection of something we had sent out, then SETI could state confirmation of their hypothesis; we would have "detected some evidence that someone else out there is intelligent, technological, and broadcasting signals." So far, SETI has NOT detected anything so conclusive (at least, nothing they've publicized). The hypothesis remains unverified, but that hasn't ruled out the possibility that it might be verified at

**I, for one, welcome our new**



**OVERLORDS**

some future time (perhaps even with some future technology for listening). As Medero wrote in par. 5, "As the scientific method progresses, it should move on to theories derived from the hypotheses based on further experimental evidence either validating or disclaiming the hypothesis." SETI is doing just that, every time they try another section of sky, or a new upgrade on their radiotelescope systems. Serious researchers can always review the records of whatever may have been received so far, looking for "signs of intelligence" which may not have been recognized yet (same goes for the effort to understand what dolphins are saying). SETI researchers continue to listen for evidence within the constraints of diminished funding, and when the technology isn't being used by someone else for other purposes. The hypothesis (the correct one, not Medero's version) remains neither proven or disproven so continued listening is still perfectly valid, from a scientific perspective.

In par. 6, Medero suggests that SETI has "beliefs... based upon the authority of pseudo science." I would suggest that this is Medero's unproven interpretation, not an accurate representation of what the large group of independent SETI researchers collectively believe. His claim regarding "to eliminate the discomfort of doubt" reads more like a rebuttal of religious belief (wherein a set of unquestionable, dogmatic beliefs are actually set forth as a proposed explanation of some mystery of the universe) than a meaningful critique of SETI's valid attempt to seek out potential evidence from the natural universe. SETI has not, to my knowledge, ever made any assertion which qualifies under Medero's charge as being "misinformation that asserts itself as truth."

Perhaps SOME people believe that, "If we've spent this much time, we must be on the right track," but that is certainly NOT any sort of scientific conclusion. Rather, it is a classic example of a non sequitur, a conclusion which does not follow from the premise offered. Has anyone from SETI actually made such a remark, on the official record? Medero offers no citation. Instead, it reads like some anti-science propaganda that someone opposed to continued funding of SETI might have written. The amount of time spent on SETI so far (or on any scientific pursuit, for that matter) offers no logical support for the conclusion that "we must be on the right track." In fact, many long-held ideas (allow me to borrow Medero's own example of belief in a flat Earth, just for one) were pursued and believed for long periods of time,

only to be proven incorrect BY the very scientific method which found evidence to indicate something more scientifically accurate.

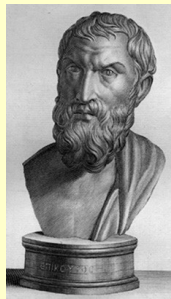
In par. 7, Medero suggests alternative methods of seeking evidence of extraterrestrial life. This is a commendable point to include; where possible, suggest an alternative that might prove productive! In this case, it already has. Amino acids have already been found among the chemical constituents of comets and asteroids, in space dust, and "contaminating" the surfaces of our own space craft. The origin of these chemical traces has yet to be determined, but they certainly HAVE been located in space. We are, in fact, looking for "parts" of life, IN ADDITION TO "the whole assembly." As the opportunity arises, exploratory missions to other celestial bodies will continue to seek out evidence in any and all recognizable forms, however they may present themselves, because that is what science is seeking in space (among other facts and discoveries which might turn up along the way). SETI is simply one project among many,

many dozens of ongoing efforts to learn whatever we can discover, effectively by looking for whatever we can find, using the tools available to us.

In the final analyses, a major portion of scientific knowledge is the result of serendipitous discovery, which by definition may come along at any time, in any form, by any means. If we wrap ourselves too completely in the robes of our own skepticism, we may end up blinding ourselves to the very serendipitous observations that could lead to the next advancement in our knowledge. Perhaps it's best to leave our eyes and ears open, toward ALL frontiers.

Mr. Medero, I hope you'll continue trying to find examples of misguided or misapplied science; it is important to

examine things which go on around us, and to question their validity. In this particular case, I suggest that you might have followed a gut feeling about SETI, perhaps supported by conversations or writings you've come across. I hope I've managed to show some of the ways your critique went wrong, so you can learn from them and become a better critical thinker. I'm sure you mean well, but you seem to need more practice using the tools of this pursuit. Keep trying, but always try to get a little better at it as you go.



### Titus Lucretius Carus

(99 - 55 BC)

Roman philosopher and poet

If atom stocks are inexhaustible,  
Greater than power of living things to count,  
If Nature's same creative power were present too  
To throw the atoms into unions — exactly as  
united now,  
Why then confess you must  
That other worlds exist in other regions of the sky,  
And different tribes of men, kinds of wild beasts.

— Titus Lucretius Carus, *De Rerum Natura* (trans. Alban Dewes Winspear, 1955), 1st Century BC.

# Terra-forming Venus, A Sci-Fi Speculation

by Paul Schlueter III

Fifty years ago, no less a luminary than Dr. Carl Sagan himself, then at the University of CA, Berkeley, proposed experimenting with atmospheric manipulation on our sister planet, Venus. The general idea was to "drop" some Terran algae onto Venus, where they could perhaps begin to consume some of that planet's carbon dioxide and make its atmosphere more acceptable for Earth-based life forms.

The article was published in Science News, April 8, 1961. Though Sagan responsibly insisted that current conditions on Venus should be exhaustively investigated before we begin tinkering, the idea of seeding life on another planet in our solar system has its appeal. Why should Terra, alone, harbor the sum total of all known life in our Universe? Why not make the first move toward creating an Ark of sorts, where evolution will have yet another opportunity to proceed?

Of course, we haven't quite ruled out the possibility that Venus may already harbor some form of life. Unlike Mars, where the atmosphere is probably far too thin to support much of an ecology, Venus is wrapped in such a dense and moist atmosphere that we really cannot tell whether its surface might support some primitive life. Our morning star has captured our imaginations enough that we named it after a goddess of Love and Femininity, yet it has inspired somewhat less attention than Mars in terms of rover missions and colonial plans, due in part to that damnable soup she has for an atmosphere. NASA has done extensive remote radar mapping of the surface, and we have a fairly detailed idea of the contours of Venus. We also know that she lacks the huge oceans that are thought to have been the brewing pot of this planet's first life forms.

We DON'T have much in the way of samples from the

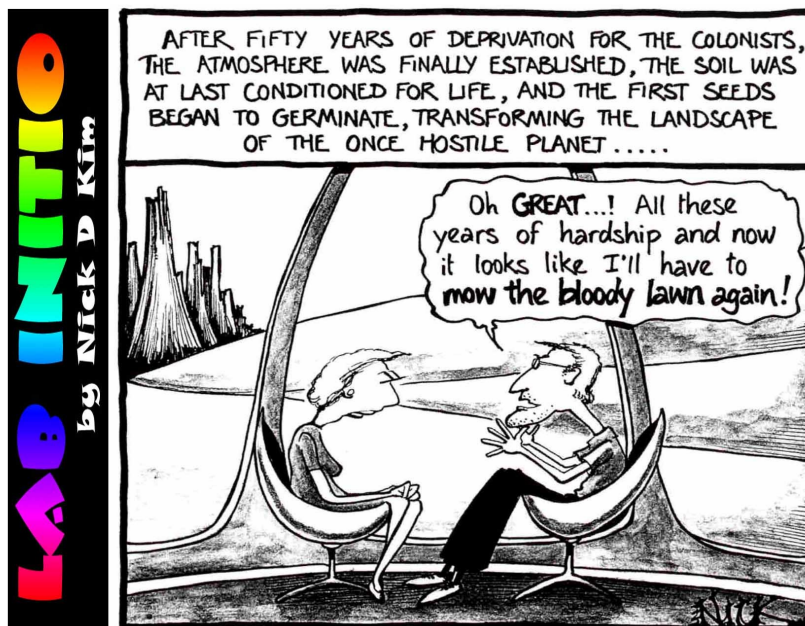
Venusian surface, or its relatively shallow sub-surface layer. There has never been a public frenzy over any meteorite collected from the ice of Antarctica, purported to have been blasted from Venus's surface by another meteoric impact. You'd need better connections at NASA than I have, to find out what physical evidence of the Venusian sphere we actually do have, but barring a major governmental conspiracy to conceal a race of hyper-enticing Amazonian nymphs (which, if I were the Government, I'd keep for myself, as well), nothing we have even suggests that life might already exist there.

OK, so what might there be in Sagan's old idea? We know quite a bit more about the composition of the Venusian

atmosphere today; it turns out to be rather caustic, if I recall correctly, and though there is considerable water vapor there, I can't recall reading of any lakes, ponds, or other collections of standing, liquid water. I do recall considerable evidence of volcanism, and sufficient meteoric cratering to deduce that any erosive forces on the surface must work very slowly. Also, Venus lacks a moon of any substantial merit; our own moon is thought to have had a crucial mixing influence on our oceans, allowing the constituent materials of potential life to be continually churned

together until the right combination for spontaneous genesis occurred.

Sagan actually suggested a particular algae for consideration, a blue-green sort from the Nostocaceae family. Far be it from me to challenge his thinking on that - my knowledge of algae is quite minimal. However, our biological sciences have progressed quite a bit in fifty years, and we have recently become aware of "extremophile" life forms that seem to thrive in places where you'd scarcely



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

expect anything to survive, such as oceanic geo-thermal vents and mineral mines miles beneath the Earth's surface. Perhaps there are other life forms which would have a better chance of taking root on Venus than the algae Sagan once favored.

In actual fact, it would be stupid to attempt such a costly project as seeding life on a sister planet with only one species of life! Any serious attempt would surely include dozens, perhaps thousands, of individual microbes, bacteria, viruses, amoebae, and so on, both in discrete monocultures and in globs of goo that contain symbiotic mixtures of co-dependent organisms. The seeding effort would need to include a wide dispersal technique, so that each type of "seed" might be given the chance to settle into a variety of different micro-environments. One would hope that there would also be some manner in which to "fertilize" Venus herself, probably by including chemicals chosen for their likelihood of catalyzing a propitious "yolk" or "loam" in which each "seed" might have sufficient chance to germinate, and at least thrive for a few generations, hopefully producing progeny that can (by evolutionary selection) manage to eke out a survival-mode living there for the long term.

The point is, there are experts (both specialists and generalists) far better qualified than I to list the specific premium constituents. Our sciences have a far better chance today than they would have fifty years ago of launching just such a seeding mission to Venus. It also follows that we'll know still more in another fifty years when we could make an effort with still greater chances of success. The benefit of going ahead and sending such a mission today would be that, in fifty years, we can send next-generation rovers there to see if anything discernable has taken root and begun to spread, or if all our current seeds have failed. The knowledge gained from such a first trial would go a long way toward planning a better follow-up effort, either way.

Then there's the ethical controversy that would surely

follow announcement of such a plan. Should any democratic government make such an effort, there would be inevitable contention about whether it is "playing God" to attempt to seed life elsewhere in the solar system; a certain mentality would find such an effort to be an unacceptable affront to cherished creationist beliefs. Also, nationalistic (and perhaps even racial) tensions would cause international concern, because who wants to let the other guys make the choices about which life forms to select or reject? Whether there were valid biological issues or not, surely one group would accuse any other of genotyping, of exclusionism, and of uncountable other emotional triggers. Were the U.S. to send such a mission, could the third world resist accusing us of colonialism on the grandest scale yet? And what if we succeeded in planting life? Would being that life's "progenitors" entitle the sending country to exclusive commercial rights (keep in mind that we are even now engaged in worldwide races to "patent" not only pharmaceuticals, but even genomes themselves!)

Given that inter-governmental squabbles would probably get in the way of publicly carrying out such a mission (always operating on the assumption that secret government conspirators haven't already colonized every planet in our system - LOL), it would probably be most likely that some ultra-wealthy individual might undertake such a project, essentially as a rogue. The space race itself is becoming less and less the exclusive arena of governments even now, and individuals and corporations have begun to take steps toward exploiting space for private ends. Why wouldn't some multi-national economic powerhouse gamble a tiny percentage of its net worth in such a project, against the hope that it may pay off in some yet-unimaginable way at some future date? Granted, Terra-forming Venus sufficiently to support human life would probably take millennia, at best. Yet, it's conceivable that extremophile cultivation might be achievable in but a single mission, and once a conglomerate

## Queen of Outer Space

Actually, Venus has already been "terra-formed" as you can tell from this movie poster.

In 1958 some American astronauts, all men, are drawn off course by a mysterious energy ray. They crash land on Venus and are captured by a band of beautiful women, mostly brunettes, in very practical chiffon miniskirt tunics. The Queen of this band hates men and had banished all Venusian males to another planet. The evil Queen plans to have the hapless astronauts executed.

Not to worry. There is a rival faction of beautiful women also wearing chiffon miniskirts led by Zsa Zsa Gabor, mostly blondes, who rather like men and no doubt are interested in the handsome, although somewhat dim-witted, astronauts.

Then the story gets ridiculous ....



could prove it had a substantial, ongoing experiment underway, wouldn't they be entitled to bar all others from any activity that might interfere? Nobody has yet succeeded in producing a lush mat of life on any alien body, so there's no real precedent.

Suppose General Life Organisms, Inc. (to invent a fictitious name) were to secretly seed Venus today; in ten year's time, suppose they brought back proof of a literal ecosystem of alien organisms well-adapted to Venusian conditions, thriving across an ever expanding area already larger than, oh, maybe Texas or Alaska! Suppose that a second seeding effort managed to introduce nematodes, pseudopodera, possibly even insects, which were showing signs of adapting well. There's literally no way to anticipate how quickly life might adapt and evolve, given an environment free of predators, once it managed to evolve just far enough to find its niche. Could such life forms produce new pharmaceuticals valuable to us here on Earth? Could they perhaps develop some form of adapted photosynthesis that turns out to show us how to make solar energy suddenly far more efficient?

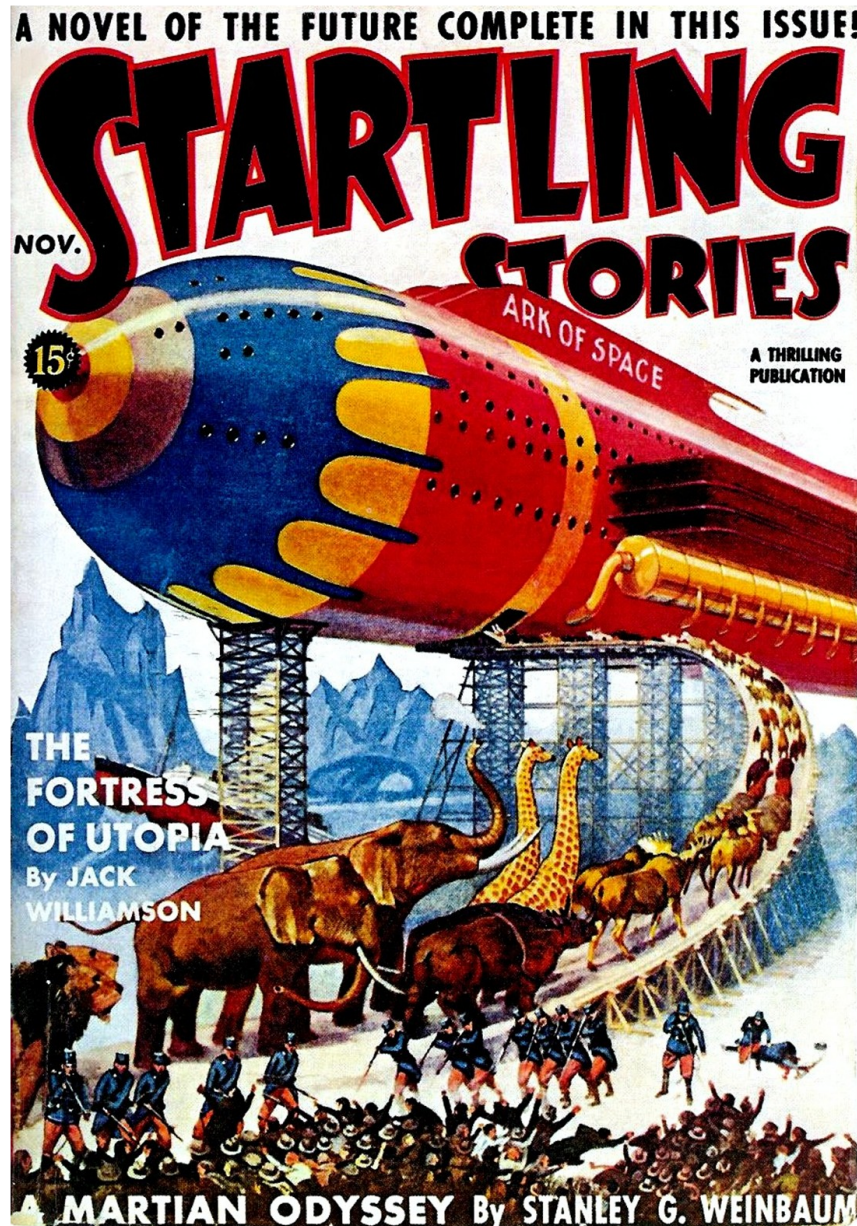
What if the new life form turned out to grow hyper-efficiently in Venus-light, and that there turned out to be some simple method of turning that life form's waste material into useful hydrocarbon fuels? With water vapor as an additional product? And maybe it also manages to extract platinum from the Venusian soil, in the process? If YOU ran that company, what would limit the means you'd be willing to enlist to protect your investment from all encroachers? What would stop you from literally

taking over the Earth itself, as the superior economic power of the globe?

Carl Sagan saw the best in humanity, as a species, even when he surely must have noticed our darker tendencies. He had the highest hopes for our technologies, particularly when it came to solving some of our perennial problems such as hunger, avoidable diseases, and sheltering/clothing the

poorest of humanity. I have little doubt that he saw the brightest of hopes for his idea of seeding Venus with algae, as well.

As his futuristic fantasy comes ever closer to potential fruition, are we any closer to demonstrating responsible husbandry of such an alien ecosystem? Are we really ready to engage in our own Genesis Project, possibly with the distant need of finding an alternative home for our own species within which to weather some huge meteor disaster or our own global environmental change? And, if we aren't quite ready to undertake such a project ourselves, are we prepared to prevent someone else from doing so at their own initiative, or else to idly stand by and watch from the sidelines as they do? Maybe it's worth starting the conversation now, while it's still just speculation.



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

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# 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, September 17, 2011 at 2:00 PM In room S2-3 in the Winnet Student Life Building**

**The Search for Extra Terrestrial Intelligence**, or SETI, has gone on since it was first recognized that the planets and stars are objects like the earth and the Sun. Various techniques have been proposed, from dream journeys to lighting immense fires in the deserts, before we had electronics and nuclear technologies. Some of the present techniques will be discussed, and the possibilities of future systems based on what have been planned by various groups and organizations. Modern communications techniques in everyday use will be mentioned, and a few props will be brought to demonstrate a few concepts.

Our speaker is **Earl Bennett, President of the Philadelphia Area Space Alliance**, and SETI League member. Bennett was born in Philadelphia, in 1949, and attended Drexel University. His interest in space exploration and science has lead him to join various organizations including: The SETI League, The Planetary Society, AMSAT (The Amateur Satellite Corporation), and The National Space Society, N.S.S. Earl has been President of the Philadelphia Area Space Alliance for a number of years. They promote science and technology education by performing outreach to the general public as guests of various museums and organizations.

**Saturday, October 15, 2011 at 2 PM. PhACT Lecture - "*Straight and swift to my wounded I go*": The Reality of Civil War Medicine and its Interpretation**

**Robert D, Hicks, Ph.D.**, curator of the Mutter Museum at the College of Physicians of Philadelphia, will discuss issues of medicine during the Civil War.

**Saturday, November 19, 2011 - TBA**

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.

**Friday, September 9, 2011 -- Delaware Valley MENSA General Membership** is generally on the 2nd Friday of the month. Check the MENSA calendar at: [http://dvm.us.mensa.org/calendar.shtml#gm\\_meeting](http://dvm.us.mensa.org/calendar.shtml#gm_meeting)

**Monday, September 12, 2011 at 6:00 PM** at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

**Science on Tap** is a monthly gathering that features a brief, informal presentation by a scientist or other expert followed by lively conversation.

**Chile peppers** are one of the most notable gifts of the New World to the Old. The global spread of chile peppers altered world cuisine, giving us everything from moles to masalas. Just as important, the “heat” of chile peppers provides a window for understanding the sensations of pain and temperature.

In this spicy illustrated talk, biochemist **Joseph Rucker** will share his interest in the history and science of chile peppers. Joseph Rucker, Ph.D., is the director of research and development at Integral Molecular, Inc.

Presented by the American Philosophical Society (APS) Museum.

Open to the public (age 21+ or accompanied by chaperone 25 years or older).

**Tuesday, September 13, 2011 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103

**Sylvia Nasar | Grand Pursuit: The Story of Economic Genius**

Economist and journalist **Sylvia Nasar** is the author of *A Beautiful Mind*, the bestselling biography of the schizophrenic—and Nobel Prize-winning—mathematician John Nash. The book won the National Book Critics Circle Award and inspired an Academy Award-winning film starring Russell Crowe. Her new book brings to life some of the most important thinkers in 20th century economics, from Friedrich Engels and John Maynard Keynes to F. A. Hayek and Amartya Sen. *Grand Pursuit* shows how each was able to use economics as a tool to improve mankind's fate through advancing its material circumstances. The John S. and James L. Knight Professor of Business Journalism at Columbia University, Nasar has written for *Fortune*, *U.S. News & World Report*, and the *New York Times*.

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

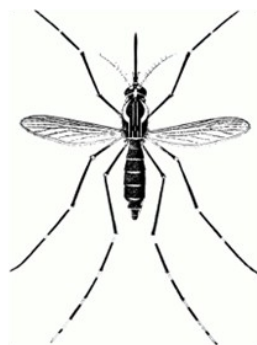
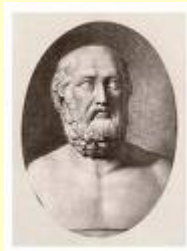
Tickets: <http://libwww.freelibrary.org/authorevents/tickets.cfm>

**Wednesday, September 14, 2011 at 7:15 PM** at the Franklin Institute. The Rittenhouse Astronomical Society. Laura Misajet will discuss **The Effect of Planetaria on Modern Media / Culture**. A warm welcome home to Laura who was a previous lecturer and show producer here at the Fels Planetarium. Her extensive background in planetarium education coupled with running her own business as she pioneered development of all-sky visuals for planetaria in the early 1990's gives her a rich background from which to talk about the influence of planetaria on our media and culture. Laura now works with Zeiss as a planetarium consultant and sales representative.

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

The Rittenhouse Astronomical Society meets the second Wednesday of the month.

**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.



**Wednesday, September 14, 2011 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

**“I'd rather be here than in Philadelphia”: Yellow Fever Crosses the Delaware**

The devastating yellow fever epidemics of 18th-century Philadelphia, particularly the horrific affliction of 1793, have long attracted the attention of historians, novelists, and even film-makers. But the mosquitoes that brought on the epidemic also knew how to cross the Delaware River. College Fellow and historian **Sandra Moss, MD, MA, FCPP**, will describe the little-known events on the New Jersey side of the river.

**Pediatric Radiology: The Philadelphia Story**

As with all other elements of the medical care of children, pediatric radiology is a world unto itself, with its own requirements and challenges. College Fellow **Richard I. Markowitz, MD, FCPP**, pediatric radiologist at The Children's Hospital of Philadelphia and Professor of Radiology, Perelman School of Medicine at the University of Pennsylvania, has carefully researched the history of this subspecialty in Philadelphia, a city

with a stellar pediatric heritage.

**Speakers:**

- **Sandra Moss, MD, MA, FCPP**, general internist and historian
- **Richard I. Markowitz, MD, FCPP**, pediatric radiologist at The Children's Hospital of Philadelphia and Professor of Radiology, Perelman School of Medicine at the University of Pennsylvania

Free and Open to the Public. Register at: <http://www.collphyphil.org>

**Thursday, September 15, 2011 - 10:00 a.m. to 2:00 p.m.** at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106

This installment of the **Joseph Priestley Society (JPS)** lecture series will include the symposium **“Commercializing Green Chemistry and Biomass-Derived Product Lines,”** moderated by Greg W. Clutter, chief operating officer, Mid-Atlantic Technology, Research and Innovation Center (MATRIC). Keith A. Pauley, president and CEO, MATRIC, will deliver the keynote address **“MATRIC's Innovation Life-Cycle Model: From Beakers to Business.”**

This meeting is Open to the Public but registration is required. Fee: \$25.00 includes lunch.

<http://www.chemheritage.org>

**Thursday, September 15, 2011 at 6:00 PM** at The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia, PA 19103 Networking reception: 6–6:30 pm

**Urban Sustainability Forum - Attracting Sustainable Business**

Forget Philadelphia's inferiority complex. Philly is a destination for sustainable businesses looking to relocate to a vibrant, talent-rich environment. Learn about the City's efforts to attract green businesses and hear about the success stories from companies that chose Philly!

Featuring:

- Jeff Bartos**, President and Chief Executive Officer, Mark Group
  - Kirsty Halliday**, Sustainability Advisor, e3bank
  - Karen Randal** (Moderator), Director, Office of Business Attraction and Retention, City of Philadelphia Department of Commerce
- Free. Register at [usfattractingsustainablebusiness.eventbrite.com/](http://usfattractingsustainablebusiness.eventbrite.com/)  
[www.ansp.org/environmental/](http://www.ansp.org/environmental/) 215-299-1108 [cep@ansp.org](mailto:cep@ansp.org)

## PhACT Event

**Saturday, September 17, 2011 at 2:00 PM-** PhACT Meeting - The Search for Extra Terrestrial Intelligence. Earl Bennett who has been President of the Philadelphia Area Space Alliance (PASA) for a number of years will discuss this topic. PASA promotes science and technology education by performing outreach to the general public as guests of various museums and organizations. See Page 1 for more details.

**Saturday, September 17, 2011 at 6pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurelhillemetery.org>



**Unearthing Laurel Hill by the Light of the Harvest Moon**

\*TWILIGHT TOUR\* Laurel Hill seems to acquire an unexplained aura of magic and mystery after the sun goes down. Gain a new perspective on this historic site in the dark of night.

\$20.00 general / \$17.00 members / \$15.00 seniors & students.

Children under 12 are free

**Sunday, September 18, 2011 at 2pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200 <http://www.thelaurelhillemetery.org>

**New Jersey in the Civil War: Remembering the Boys Beyond Our Blue River**

From Privates to Generals, equipment and supplies, New Jersey played an important role in the Civil War. The regiments of Pennsylvania's neighbor to the east fought surely and bravely and were undoubtedly a part of the Union's success. As we celebrate the sesquicentennial of this famed conflict, learn the stories of the war veterans who travelled across the river and now find their final resting place beneath Pennsylvania soil.

\$15.00 general / \$12.00 members / \$10.00 seniors & students

Children under 12 are free.

**Tuesday, September 20, 2011 at 6:00 pm** at American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut St., Philadelphia 19106

**"Designing the Wild and Cultivating the City"**

A lecture by **Fritz Haeg** ... Fritz Haeg will present his recent work including the series of Edible Estate gardens – highly visible domestic urban productive pleasure gardens planted from Istanbul to Austin, London to Los Angeles – and the urban wildlife architecture of Animal Estates. Both projects suggest city environments that are more connected to nature, useful, participatory, and fun.

Free.. Reservations are required. To register, contact [museum@amphilsoc.org](mailto:museum@amphilsoc.org) or 215.701.4421

This event is co-sponsored by the Pennsylvania Horticultural Society

**Wednesday, September 21, 2011 | 12:00n – 1:00PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

**Food & Thought: "Done Deaning: A View Through the Retrospectiscope"**

The first of the College's fall 2011 *Food & Thought* lectures will focus on the challenges and rewards that **Arthur H. Rubenstein, MBBCh, FCPP** faced during his tenure as Dean of the Perelman School of Medicine at the University of Pennsylvania. As former Dean of one of the best medical schools in the country, Dr. Rubenstein will highlight the exciting opportunities with which he was involved to expand education, research, and patient care at the University of Pennsylvania. From an administrative perspective, he will discuss the importance of a tight organizational model that places a premium on the selection of colleagues who form the leadership team, as well as the delegation of duties to these team members. Finally, Dr. Rubenstein will discuss the financial model which underpins the academic medical center and future budget realities for academia.

Speaker: **Arthur H. Rubenstein, MBBCh, FCPP**, former Dean of the Perelman School of Medicine, the University of Pennsylvania

Cost \$12.50 includes lunch. Register at: <http://www.collphyphil.org>

**Thursday, September 22, 2011 at| 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

**Premiere of *Through the Weeping Glass: On the Consolations of Life Everlasting (Limbo & Afterbreezes in the Mütter Museum)* by the Quay Brothers**

*Through the Weeping Glass* is a reflective hybrid documentary on the collections of books, instruments, and medical anomalies at The College of

Physicians of Philadelphia. The coupling of the Quay Brothers' vision with the collections of the College's Historical Medical Library and Mütter Museum has produced a riveting experience of contemplative set pieces exploring the College. This short film (*running time: 31 minutes*) is the first made in the United States by these internationally recognized artists. Adding to the film's visual strength is a powerful musical score by composer **Timothy Nelson** and a resonant voice-over by **Derek Jacobi**.

The film premieres at the College on September 22, with a **moderated conversation with the artists**. It goes on to debut in New York City on September 24 at The Museum of Modern Art, New York City, and in Los Angeles on September 27, hosted by The Museum of Jurassic Technology. An exhibition guest curated by **Barbara London**, Associate Curator, Department of Media and Performance Art, The Museum of Modern Art, on the making of the film opens in September 2011 in the Mütter Museum. Subsequent to the premiere screenings, the film will be available for purchase on DVD with an accompanying booklet.

**About the Quay Brothers**

Two of the world's most original filmmakers, the Quay Brothers are identical twins who were born outside of Philadelphia in 1947. The Quays studied illustration in Philadelphia before going on to the Royal College of Art in London, where they began making animated shorts in the 1970s. They have lived in London ever since. They are best known for their classic 1986 film *Street of Crocodiles*, which filmmaker Terry Gilliam selected as one of the ten best animated films of all time. In addition to *Through the Weeping Glass*, the Quay Brothers' other commissioned films over the past twenty years include *Anamorphosis* (1991), *The Phantom Museum: Random Forays into the Vaults of Sir Henry Wellcome's Medical Collection* (2003), and *Inventorium of Traces* (2009).

*Through the Weeping Glass* was commissioned by *The College of Physicians of Philadelphia* and jointly produced by *Atelier Koninck QBFZ, Ltd.*, and *PRO BONO* films.

*This project has been supported by the Pew Center for Arts & Heritage through the Philadelphia Exhibitions Initiative.* Free and Open to the Public. Register at: <http://www.collphyphil.org>

**Thursday, September 22, 2011 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103

**Stephen Greenblatt | The Swerve: How the World Became Modern**

Shakespearean scholar and Harvard professor Stephen Greenblatt is widely acclaimed as the father of New Historicism, which concentrates on understanding works of literature within their historical and social contexts. *The Swerve: How the World Became Modern* describes how the discovery of an ancient Roman philosophical epic—*On the Nature of Things* by Lucretius—inspired artists, writers, and thinkers. *On the Nature of Things* is a beautiful poem of dangerous ideas: that the universe functioned without godly interference, that religious fear of death was damaging to human life, and that matter—including the human body—was made up of atoms in eternal motion. Greenblatt is the author of nine books, including the New York Times bestseller *Will in the World: How Shakespeare Became Shakespeare*.

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

Tickets: <http://libwww.freelibrary.org/authorevents/tickets.cfm>

**Friday, September 23, 2011 5:30 PM - 7:30 PM** at The American Philosophic Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia

**REBECCA KAMEN: Making the Invisible, Visible: Discoveries Between Art and Science** Reception: 5:30pm Program: 6:00pm

Rebecca Kamen's work explores the nexus of art and science, informed by wide ranging research into cosmology, spirituality, philosophy and science. Ms. Kamen has exhibited and lectured about her work both nationally, and internationally in China, Hong Kong, and Egypt. She has been the recipient of a Virginia Museum of Fine Arts Professional Fellowship, a Pollack Krasner Foundation Fellowship, a Strauss Fellowship, two VCCS Professional Development Grants, and a Travel Grant from the Chemical Heritage Foundation. In 2001, Ms. Kamen was awarded a President's Sabbatical Award from Northern Virginia Community College where she has been a Professor of Art since 1978. She is the recipient of the Chancellors Commonwealth Professorship for 2011-2013, to further



develop her work bridging art and science. Ms. Kamen's work is represented in many private and public collections such as, KPMG Peat Marwick Corporation, Gannett Corporation, IBM, Capital One and the Institute for Defense Analysis.

This lecture is co-sponsored by The Philadelphia Area Center for History of Science (PACHS) and The Chemical Heritage Foundation.

Free and open to the Public. To register: <http://www.amphilsoc.org/node/2803>

**Saturday, September 24, 2011 at 2pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

#### The Worlds of Thomas Jefferson at Laurel Hill Cemetery

Adopted sons, signers of the Declaration, painters, sculptors, men of science, ladies of belle letters, famous physicians, pariahs of free press, purveyors of fine wine and, of course, political provokers both friend and foe: all recognized by Thomas Jefferson as luminaries in our nation's early "Constellation of Worthies." They now rest peacefully at Laurel Hill Cemetery.

Join William David Barker of Williamsburg, Virginia – foremost Jefferson scholar and acclaimed portrayer of America's third president – on this historical exploration of the worlds of Thomas Jefferson at Laurel Hill.

\$15.00 general/ \$12.00 members / \$10.00 seniors & students

Children under 12 are free

**Sunday, September 25, 2011 at 2pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200 <http://www.thelaurehillcemetery.org>

<http://www.thelaurehillcemetery.org>

#### Stop the Presses: Laurel Hill's Newspaper Publishers

If you have an interest in publishing or journalism, than this is the tour for you! Laurel Hill is the location where all of the city's major newspapers are all brought together in one place. Our cemetery contains the final resting places of not just a few but all of the publishers of Philadelphia's major newspapers. This tour, led by Dr. J. Joseph Edgette, will visit their graves and tell the stories of success, failure and intrigue surrounding these influential and powerful men. Publishers of the Philadelphia Ledger, Inquirer, Daily News, and Evening Bulletin will be among the major newspaper Czars included along with a few lesser known surprises. Join us for an afternoon that is sure to give a whole new meaning to the word "deadline."

\$15.00 general / \$12.00 members / \$10.00 seniors & students. Children under 12 are free

**Monday, September 26, 2011 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103

#### Daniel Yergin | The Quest: Energy, Security, and the Remaking of the Modern World

Renowned energy authority Daniel Yergin received the Pulitzer Prize in 1991 for *The Prize: The Epic Quest for Oil, Money and Power*, a New York Times bestseller that illustrated how oil shapes geopolitics and the global economy. Of his following book, *Commanding Heights: The Battle for the World Economy*, a reviewer for the Wall Street Journal said, "No one could ask for a better account of the world's political and economic destiny since World War II." Yergin is chairman of IHS Cambridge Energy Research Associates, a leading research firm, and is CNBC's Global Energy Expert. His latest book is the long-awaited successor to *The Prize*, a riveting inside story about the massive corporate mergers that transformed the oil market and the resurgence of interest in renewable energy, offering a unique perspective on the issue of climate change.

Pine Tree Foundation Endowed Lecture

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

Tickets: <http://libwww.freelibrary.org/authorevents/tickets.cfm>

**Monday, September 26, 2011 at | 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

#### The History of, and Contemporary Advances in, Botany, Herbal and Alternative Medicine

Join us for an exciting lecture that will explore botany's place in medical history, as well as its standing in medicine today. **Alfred Ernest Schuyler, PhD**, Curator Emeritus of Botany, the Academy of Natural Sciences of Philadelphia, will explore "the state of the art" of botany, herbal, and alternative medicines in the United States during the Revolutionary War. He will describe how these "botanicals" and herbal remedies were a common feature in the arsenal of the late 18th-century physician.



Providing a contemporary perspective will be **Ludovic Rassat**, President and CEO of Boiron, USA, one of the largest manufacturers of homeopathic products in the world. Mr. Rassat will discuss the renewed and increasing interest in homeopathic and herbal remedies.

Speakers:

- **Alfred Ernest Schuyler, PhD**, Curator

Emeritus, The Academy of Natural Sciences of Philadelphia

- **Ludovic Rassat**, CEO and President of Boiron, USA

*Co-sponsored by the American Revolution Center and The College of Physicians of Philadelphia. The lecture is supported by a grant from the Richard Lounsbery Foundation.*

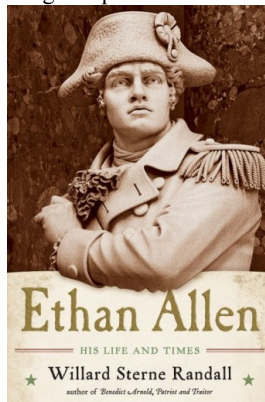
Free and Open to the Public. Register at: <http://www.collphyphil.org>

**Tuesday, September 27, 2011 at 7:30PM** at Free Library of Philadelphia, 1901 Vine Street, 19103

#### Lisa Randall | Knocking on Heaven's Door: How Physics and Scientific Thinking Illuminate the Universe and the Modern World with Gino Segre | Ordinary Geniuses: Max Delbrück, George Gamow, and the Origins of Genomics and Big-Bang Cosmology

Harvard professor **Lisa Randall**—renowned for her research on particle physics and cosmology—jolted the physics world with the 1999 Randall-Sundrum model, a fascinating and complex extra-dimensional theory of the universe. The first tenured woman in the Princeton physics department and the first tenured female theoretical physicist at MIT and Harvard, she was named one of Time's "100 Most Influential People in the World" and Esquire's "75 Most Influential People of the 21st Century." In addition to her acclaimed 2005 book *Warped Passages*, she also wrote the libretto for *Hypermusic Prologue: A Projective Opera in Seven Planes* that premiered at Paris's prestigious Centre Pompidou. With *Knocking on Heaven's Door*, Randall illustrates the aims of the Large Hadron Collider, and examines the role of risk, creativity, beauty, and truth in scientific thinking.

Professor of Physics and Astronomy at the University of Pennsylvania, where he has taught since 1967, **Gino Segre's** writing illuminates the history of science and the scientists whose discoveries propelled the field forward. Critically acclaimed and compelling, Segre's *Faust in Copenhagen* describes the 1932 Copenhagen gathering of physicists at a moment of great transition, when a rapid succession of discoveries marked the beginning of nuclear physics. The New York Times described *A Matter of Degrees*, Segre's book about temperature, as "both refreshing and rewarding... a pleasurable introduction to many key scientific ideas." In *Ordinary*



*Geniuses*, Segre tells of two scientists and friends whose maverick approach to research profoundly influenced modern science.

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

**Wednesday, September 28, 2011 at 7:15 P.M.** At Brittingham's Irish Pub and Restaurant, 640 East Germantown Pike, Lafayette Hill, Pennsylvania. (610)828-7351. Willard Sterne Randall on his new book **Ethan Allen: His Life and Times** released June 2011.

**Thursday, September 29, 2011 at 7:00 PM** in the Skyline Room located on the second floor of the Free Library of Philadelphia (1901 Vine Street, Philadelphia). **The Freethought Society** will host **Dr. Alan Mann**, an anthropologist at Princeton University will discuss **“What does it mean to be human, and how did we evolve this unique capability?”** **When and in what context did modern humans become “human”?** We know that we differ in substantial ways from chimpanzees, our closest living relatives, but when did these unique attributes arise and how can we account for them? The fossil and archaeological record provides some revealing insights into when our uniqueness appeared. The process through which we emerged as this special species, however, does not support traditional religious views of how we became unique. The evidence requires that religious concepts of the ‘soul’ or other special other-worldly qualities be seriously reconsidered. Dr. Mann will address these important issues and more during his presentation.

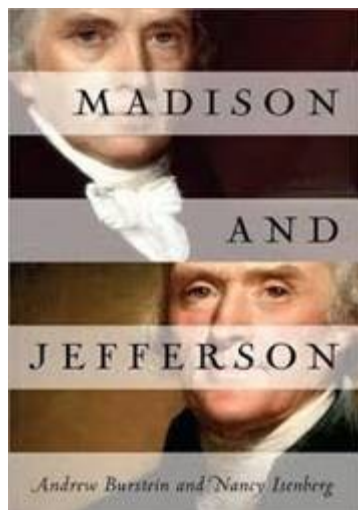
<http://www.ftociety.org/>

This event is free and open-to-the-public.

**Wednesday, October 5, 2011 at 5:30 to 7:30 PM** at the American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia. Reception: 5:30pm Program: 6:00pm

**ANDREW BURSTEIN and NANCY ISENBERG: Madison and Jefferson**

Please join us for a lecture, reception, and book signing



Andrew Burstein and Nancy Isenberg are Professors of History at Louisiana State University. Burstein is the author of seven other books, including Jefferson's Secrets and The Passions of Andrew Jackson. Isenberg is also the author of *Fallen Founder: The Life of Aaron Burr* and *Sex and Citizenship in Antebellum America*. Students of political culture in the eighteenth and nineteenth centuries, they previously collaborated on a study of death in early America: *Mortal Remains* (University of Pennsylvania Press, 2003).

James Madison is the least humanized of the founders, Jefferson the most controversial. In *Madison and Jefferson*, a thorough

reinterpretation of founding era politics, the authors have given Madison his due as a hard-nosed political partisan. He wrote scathing pieces in national newspapers; as Washington's chief adviser in 1789, he initiated the first presidential administration and then went on to undermine it a few short years later, working with Jefferson to establish the first opposition political party. Jefferson, the more expressive in letters and public documents, did not always agree with Madison's approaches, but his affection for his political partner remained undiminished over their fifty-year association. As Virginians, they often privileged their state's interests over the cause of Union, while at the same time eagerly pursuing policies of western expansion and settlement, equally aggressive in their designs against European interests in North America. The story of their long friendship is a critical, if under-studied, factor in the evolution of America's modern partisan environment.

This event is free and open to the public. To register: <http://www.amphilsoc.org/node/2804>

**Wednesday, October 5, 2011 at 5:30 to 7:30 PM** at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA

**History Live: “Cancer Therapies: Nineteenth Century to Tomorrow”** The next installment of CHF's History Live series will focus on the history and future of cancer therapies.

**Dario C. Altieri**, director of The Wistar Institute Cancer Center, and **Stephen J. Lippard**, the Arthur Amos Noyes Professor of Chemistry at the Massachusetts Institute of Technology, will appear in conversation

with **Russel E. Kaufman**, president and CEO of The Wistar Institute, and **Thomas R. Tritton**, president and CEO of CHF.

Carin Berkowitz, associate director of CHF's Beckman Center for the History of Chemistry, will serve as emcee.

Schedule:

5:30 p.m. Cocktail reception

6:30 p.m. History Live conversation

7:30 p.m. Dessert and coffee

This event is held in collaboration with the The Wistar Institute, an independent nonprofit biomedical research institute that has been dedicated to expanding the boundaries of knowledge of biology and medicine for more than a century.

History Live presents first-person accounts of legendary careers before a live audience.

CHF's Oral History Program captures and preserves the oral memoirs of notable figures in chemistry and related fields. For additional information, please contact Nancy Vonada, manager of events and donor relations, at 215.873.8226 or [nvonada@chemheritage.org](mailto:nvonada@chemheritage.org)

Free and Open to the General Public but you must pre-register: <https://www.chemheritage.org/secure/register-for-an-event.aspx?eventid=72794>

**Wednesday, October 5, 2011 - 5:30 PM - 7:30 PM** American Philosophical Society Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia **Lecture, reception, and book signing**

**ANDREW BURSTEIN and NANCY ISENBERG: Madison and Jefferson**

Reception: 5:30pm Program: 6:00pm

Andrew Burstein and Nancy Isenberg are Professors of History at Louisiana State University. Burstein is the author of seven other books, including Jefferson's Secrets and The Passions of Andrew Jackson. Isenberg is also the author of *Fallen Founder: The Life of Aaron Burr* and *Sex and Citizenship in Antebellum America*. Students of political culture in the eighteenth and nineteenth centuries, they previously collaborated on a study of death in early America: *Mortal Remains* (University of Pennsylvania Press, 2003).

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Free and Open to the Public but RSVP at: <http://www.amphilsoc.org/node/2804>

**Wednesday, October 5, 2011 at 06:00 PM** at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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



**Great Riddles in Archaeology Lecture Series: King Arthur, Camelot and the Quest for a Holy Grail**

For centuries, the legend of King Arthur, Camelot and the quest for the Holy Grail has captivated the world. Was there really a Holy Grail, and how did it find its way to Britain and the Arthurian legend? Were Arthur and the Knights of the Round Table real his-

torical figures? What does the archaeology of this era tell us? **Dr. Richard Hodges**, the Williams Director of the Penn Museum and a noted Medievalist, is the kickoff speaker of this popular lecture series, running October through June.

Admission: \$40 for 9 lecture series; \$10 at the door; \$5 with advance registration; free for Penn Museum members with advance registration.

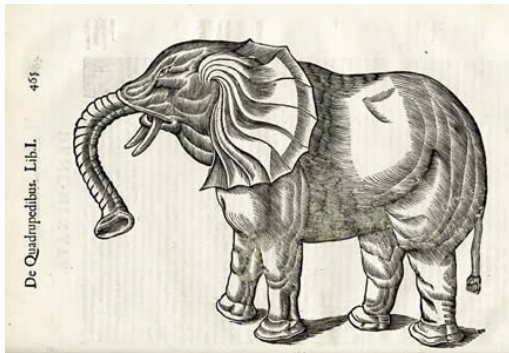
**Thursday, October 6, 2011 - 4:00 - 7:00 PM, Lecture at 5:30 PM** at the Wagner Free Institute of Science, 1700 West Montgomery Avenue, Philadelphia, PA 19121

ph 215-763-6529 [www.wagnerfreeinstitute.org](http://www.wagnerfreeinstitute.org)

**Elephants: Past, Present, Future? An Illustrated Presentation By Virginia Riddle Pearson, Academy of Natural Sciences**

Fewer than 400,000 African and Asian elephants exist today. These last remnants of the 100 million year old lineage of Proboscidea are under severe threat of extinction. Virginia Riddle Pearson will discuss the evolution and complex life history of elephants and the perilous future these sentient beings face due to the ivory poaching crisis, to relentless agricultural expansion onto elephant rangeland and migration routes, and to the lethal elephant herpes viruses, the current focus of her research.

Virginia Riddle Pearson is a Guest Researcher in the Department of Molecular Biology at Princeton University, an Honorary Associate in the Department of Vertebrate Zoology at the Academy of Natural Sciences of Philadelphia, and an Emeritus Trustee of the Zoological Society of Philadelphia.



*Aldrovandi, Ullisse. De Quadrupedibus solidipedibus volumen integrum. Bononiæ, 1649.*  
Collection of the Wagner Free Institute of Science Library.

delphia. She has studied elephants for forty years and is currently investigating transmission of the elephant herpesviruses in wild elephant populations.

This event is Free and Open to the Public.

**Saturday, October 8, 2011 from 8AM-12 noon at Chestnut Hill College - PAGES - (Philadelphia Area Girls Exploring Science)** program held at Chestnut Hill College. Sixth grade girls from the Philadelphia area engage in hands on scientific experiments that are conducted by volunteer area scientists. Program is sponsored by the American chemical Society and AAUW, American Association of University Women. Anyone or group interested in volunteering to present and conduct an experiment are welcome. Girls are split into groups of about 10 and experiments run about 40 min or so. Usually the volunteers repeat the same experiment with 3 different groups during the morning. Lunch is provided. If interested in volunteering to be a lead scientist or helper, contact: Dr. Kathy Shaginaw, [katt@verizon.net](mailto:katt@verizon.net)  
Free and open to the public.

**October 8-9-10, 2011 Annual Meade Society Fall Excursion: Pilgrims to the Battlefields of the Rebellion** 'Excursion to Civil War Washington, 1861. The outbreak of War' (tentative) Bus trip; 2 overnight lodgings; touring; dinners; historical programs by leading historians.  
Call: 215-848-7753; Jerry McCormick [gedwinmc@msn.com](mailto:gedwinmc@msn.com)



**Monday, October 10, 2011** at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

**Science on Tap** is a monthly gathering that features a brief, informal presentation by a scientist or other expert followed by lively conversation.

**Topic TBA**

**Presented by the Wagner Free Institute of Science**

For more information see: <http://www.chemheritage.org/visit/events/public-events/2011-09-12-sot.aspx>

Free and Open to the Public but you must be 21+

**Tuesday, October 11, 2011 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

**The 17th Annual Thomas Langfitt, Jr. Symposium on Health Care Policy: Comparative Effectiveness Research**

The Patient Protection and Affordable Care Act of 2010 includes provisions that support the development of comparative effectiveness research (CER). CER compares the health outcomes and clinical effectiveness of existing medical interventions, devices, pharmaceuticals, and additional components of health care delivery in an effort to improve patient outcome and cost control. While CER has the potential to achieve its stated goals, it is unclear how such research would be evaluated, incorporated into current clinical practice, and reconciled against conflicting research and clinical experience.

The panelists for this year's Thomas Langfitt, Jr. Symposium will address the issues concerning CER and its feasibility in the current health care environment. Panelists and attendees will receive discussion topics in advance to foster a case-based, interactive symposium.

Panelists:

- **Carolyn M. Clancy, MD**, Director, Agency for Healthcare Research and Quality, US Department of Health and Human Services
- **Scott E. Harrington, PhD**, Alan B. Miller Professor; Professor of Health Care Management and Insurance and Risk Management at the Wharton School of Business
- **Donald Liss, MD**, Senior Medical Director, Clinical Programs and Policy, Independence Blue Cross

*Co-sponsored by the University of Pennsylvania.*

Free and Open to the Public. Register at: <http://www.collphyphil.org>

**Wednesday, October 12, 2011 at the Franklin Institute.**

The Rittenhouse Astronomical Society meets the second Wednesday of the month. <http://www.rittenhouseastronomicalsociety.org/>

**Friday, October 14, 2011 - Sixth Annual Gravediggers Ball** to benefit the Friends of Laurel Hill Cemetery Historic Preservation Efforts

The Friends of the Laurel Hill Cemetery will again 'resurrect' the Gravediggers' Ball. This black-tie or costumed event will be held at the Crystal Tea Room at Wanamaker's and will include cocktails, dinner, dancing and musical entertainment by a dynamic 11-piece dance band. All proceeds go towards the continued restoration and preservation of historic Laurel Hill Cemetery (burial site of General Meade and many Civil War veterans!).

Cost: \$175 donation per person, At Meade Society Table: \$150 per person!  
For info call 215.228.8200, or visit [theundergroundmuseum.org](http://theundergroundmuseum.org)

**Friday, October 14, 2011 -- Delaware Valley MENSA General Membership** is generally on the 2nd Friday of the month. Check the MENSA calendar at: [http://dvm.us.mensa.org/calendar.shtml#gm\\_meeting](http://dvm.us.mensa.org/calendar.shtml#gm_meeting)

**Sunday, October 16, 2011 at 2pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200 <http://www.thelaurelhillemetery.org> - **Sinners, Scandals & Suicides**

Laurel Hill has its brave military heroes like George Gordon Meade, its uplifting reformers like Sarah Josepha Hale, and selfless philanthropists like Robert Carson. But what about the less than pure spirits?...

The South Philly gangster who got whacked when he tried to infiltrate the Schuylkill County numbers racket? The Civil War hero who made his fortune from white lightning and who, because of his many illicit affairs, was referred to by the local press as "a slayer of innocence and a robber of

chastity"? The chemical heiress who lost her money in an infamous Broadway bomb starring the producer's talentless girlfriend? The noted artist who committed suicide during the Depression when his priceless book and art collections were sold at auction for a few thousand dollars? The final resting places of these troubled souls will be among the many stops on our walking tour of Laurel Hill's scandalous, sinful and sordid side.  
\$15.00 general / \$12.00 members / \$10.00 seniors & students

## PhACT Event

**Saturday, October 15, 2011 at 2 PM. PhACT Lecture - "Straight and swift to my wounded I go": The Reality of Civil War Medicine and its Interpretation**

**Robert D. Hicks, Ph.D.**, curator of the Mutter Museum at the College of Physicians of Philadelphia, will discuss issues of medicine during the Civil War.

**Sunday, October 16, 2011 - 1pm-4pm** at the Mill at Anselma, 1730 Conestoga Road, PO Box 42, Chester Springs, PA 19425

### Harvest Festival: Brewing Beer in Colonial Days

The art of crafting beer has improved a great deal over the years, but nothing beats a colonial brew! Foodways historian Clarissa Dillon will discuss the art of colonial brewing. A must-see for any home brewing enthusiast!

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

**Wednesday, October 19, 2011 at 12:00n – 1:00PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

### Food & Thought: "Who's Afraid of Big, Bad Pharma?"

Through increased institutional and financial strength, the pharmaceutical industry has made remarkable advances in biomedical research. Working in a highly regulated environment, both in the United States and in many countries throughout the world, the industry has developed new medicines, vaccines, and devices that are as innovative as they are safe and effective.

In the last ten years the pharmaceutical industry has also responded to increased calls for transparency in its relationships with physicians and other health care professionals. This lecture will discuss the role of industry research in the future of American medicine, while exploring the balance of marketing, education, and communication to ensure that industry products are used appropriately.

Speaker: **Joseph Camardo, MD, FCPP**, Senior Vice President, Forest Research Institute

Cost \$12.50 includes lunch. Open to the Public.

Register at: <http://www.collphyphil.org>

**Thursday, October 20, 2011 at 6:30PM** at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103, (215) 563-3737 x304

### The Annual Samuel X. Radbill Lecture: *Measured Breath: Asthma, Diagnosis, and Death in Urban America*

Internist and historian **Carla Keirns, MD, PhD, MSc**, will share some findings and ideas from her forthcoming book on the history of asthma, a disease which has become alarmingly prevalent among both children and adults. Dr. Keirns, Assistant Professor and Director of the Program on the History of Medicine at Stony Brook University in New York, did her medical and historical training at the University of Pennsylvania. A question and answer session with the audience will follow the lecture.

Speaker: **Carla Keirns, MD, PhD, MSc**, Assistant Professor, Director of the Program on the History of Medicine, Stony Brook University

*Sponsored by the College's Section on Medical History.*

Free and Open to the Public. Register at: <http://www.collphyphil.org>

**Thursday, October 20, 2011 at 7:30PM** at the Free Library of Philadelphia, 1901 Vine Street, 19103

**Steven Pinker | The Better Angels of our Nature: Why Violence Has Declined**

Named one of Time magazine's "100 Most Influential People of All Time," Harvard professor Steven Pinker is a cognitive scientist whose thorough studies of language have led him to insights into the way humans form thoughts and engage the world. He has authored seven books, including the New York Times bestseller and Pulitzer Prize finalist *The Blank Slate* and the Pulitzer Prize and National Book Critics Circle Award finalist *How the Mind Works*. His new book, *The Better Angels of our Nature* charts the decline of global violence from Biblical times to the present. Pinker argues that, despite current warfare, our modern cultural institutions prove our progress over the course of history into altogether better people, now living in the most peaceful era humankind has experienced.

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

Tickets: <http://libwww.freelibrary.org/authorevents/tickets.cfm>

**Thursday, October 20, 2011 - 11:30 a.m. to 2:00 p.m.** at the Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106

This installment of the Joseph Priestley Society (JPS) lecture series will include a keynote address by **Judith Giordan**, chair, VentureWell, and senior advisor, National Collegiate Inventors and Innovator Alliance.

Schedule:

11:30 a.m. Networking reception

12:15 p.m. Lunch

1:00 p.m. Keynote speaker

2:00 p.m. Meeting adjourns

This event is part of the conference "Frontiers of Discovery: Association for Women in Science at 40."

For more information about this event, please contact Laura Naden, advancement and events administrator, at 215.873.8276 or [lnaden@chemheritage.org](mailto:lnaden@chemheritage.org).

This meeting is Open to the Public but registration is required. Fee: \$25.00 includes lunch.

<http://www.chemheritage.org>

**Friday, October 21, 2011 at 6pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA 19132. 215-228-8200

<http://www.thelaurelhillemetery.org>

### Day of Our Dead: Marking the 175th Anniversary of Laurel Hill's First Burial

175 years ago, a Quaker woman of the name Mercy Carlisle learned of the new and promising cemetery then under construction outside of Philadelphia's city limits. Though ailing, she found strength to travel to the site they were calling Laurel Hill, and in touring its emerging landscape had, according to our founder, "expressed her decided wish to be interred under the group of four large pine trees...near the center of the plot (Sec. E, #1)." Not long after, on October 21, 1836, Laurel Hill Cemetery's earth was opened for the very first time to receive Mercy's remains.

Join us, exactly 175 years to the day of our first burial, as we honor the memories of our Dead. Each participant will light a candle in solemn remembrance of their own family members, beloved friends and precious pets whose spirits have passed on. After the ceremony, toast to the lives of our Dead in an informal reception to include the "stuff" of mortality: food, drink and music. Nighttime tours of the cemetery will be offered.

**Sunday, October 22, 2011 at 1pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA 19132. 215-228-8200

<http://www.thelaurelhillemetery.org>

### Fall Family Day

Spend an autumn afternoon exploring the many wonders and mysteries of Laurel Hill Cemetery while celebrating Halloween! Fall Fun for the Family at Laurel Hill will thrill and chill both the young and old with behind-the-scenes tours of the site. The cemetery's primary location overlooking the Schuylkill River will offer visitors majestic views of the colorful fall foliage and vibrant landscape along Kelly Drive. Activities will include apple bobbing, scavenger hunts, arts and crafts, storytelling and Halloween games. Feast on an assortment of hotdogs, cookies, popcorn, hot apple cider and other spooky treats.

Attendees are advised to wear comfortable clothes and shoes, and kids are encouraged to show off their Halloween costumes!

\$20/Family

**Monday, October 24, 2011 at 6pm** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200

<http://www.thelaurehillcemetery.org>

**Edgar Allan Poe: Master of Macabre**

Edgar Allan Poe returns from beyond the grave to present some of his greatest Philadelphia works! Poe spent his most productive years in Philadelphia, and many of his now-classic tales and poems were published in periodicals owned by Louis A. Godey and George Rex Graham – both of whom are now interred at Laurel Hill Cemetery. Poe will read from “The Murders in the Rue Morgue” and “The Cask of Amontillado,” as well as other haunting works. Laurel Hill is just one of many stops in Poe’s 2011 Cemetery Tour; other visits include New York’s Sleepy Hollow Cemetery, and Mount Auburn in Cambridge, Massachusetts.

Edgar Allan Poe is portrayed by Rob Vellella, and independent literary scholar and playwright from just outside Boston. Recently, he served as guest curator for “Margaret Fuller: Woman of the Nineteenth Century” at Harvard’s Houghton Library, and as research associate for “The Raven in the Frog Pond: Edgar Allan Poe and Boston” for the Boston Public Library. He has dramatically brought to life several literary figures, including the young Henry Wadsworth Longfellow, Nathaniel Hawthorne, and Edgar Allan Poe.

Join us after-work for this one-of-a-kind experience, as Poe’s tales come to life at sunset. Afterwards, toast to the Master of the Macabre, while enjoying wine, hot cider, and Halloween treats!

\$25 per person - **Advanced Registration Required**

**Wednesday, October 26, 2011 - 5:30 PM - 7:30 PM** at American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia - **Lecture, reception, and book signing**

**DAVA SOBEL: A More Perfect Heaven**

**Reception: 5:30pm Program: 6:00pm**

In her elegant, compelling style, Dava Sobel chronicles, as nobody has, the conflicting personalities and extraordinary discoveries that shaped the Copernican Revolution. At the heart of the book is her play, “And the Sun Stood Still,” imagining Copernicus’s hesitation to publish his outlandish idea -- and the struggle that convinced him to let his manuscript see the light of day. As she achieved with her bestsellers *Longitude* and *Galileo’s Daughter*, Sobel expands the bounds of narration, giving us an unforgettable portrait of scientific achievement, and of the ever-present tensions between science and faith.

By 1514, the reclusive cleric Nicolaus Copernicus had written and hand-copied an initial outline of his heliocentric theory in which he defied common sense and received wisdom to place the Sun, not the Earth, at the center of our universe, and set the Earth spinning among the other planets. Over the next two decades Copernicus expanded his theory through hundreds of observations, while compiling in secret a book-length manuscript that tantalized mathematicians and scientists throughout Europe. For fear of ridicule, he refused to publish.

In 1539 a young German mathematician, Georg Joachim Rheticus, drawn

by rumors of a revolution to rival the religious upheaval of Martin Luther’s Reformation, traveled to Poland to seek out Copernicus. Two years later, the Protestant youth took leave of his aging Catholic mentor, and arranged to have his manuscript published in 1543 as *De revolutionibus orbium coelestium* (On the Revolutions of the Celestial Spheres) —the book that forever changed humankind’s place in the universe.

Dava Sobel is the acclaimed author of the New York Times and international best-sellers *Longitude*, *Galileo’s Daughter*, and *The Planets*, and the co-author of *The Illustrated Longitude*.

Free and Open to the Public but please

RSVP at <http://www.amphilsoc.org/node/2806>



*"De Revolutionibus Orbium Coelestium"*  
*On the Revolutions of the Celestial Spheres*

**Thursday, October 27, 2011 - 4:00 - 7:00 PM 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)

**Under Glass: A Victorian Obsession: An Illustrated Presentation By John Whitenight**

In nearly every Victorian parlor, beside the overstuffed furniture and heavy draperies, stood the Parlor shade, a glass jar protecting treasured objects - natural history specimens, waxworks, automatons, and tableaux made of human hair, feather, and shells - from dust and curious fingers. Parlor dome collector and scholar John Whitenight will trace the art, history, and allure of these miniature worlds under glass. The lecture will be illustrated by domes from his spectacular private collection, including his "Morticia Collection" of baboon-armed candlesticks and tiny cemetery scenes.



*French cemetery scene with hair from Sophie Henry, deceased, age 21, (1881). Collection of John Whitenight.*

John Whitenight, artist, educator and antique collector, has pursued his obsession with Victorian parlor domes for more than 30 years. His private collection consists of more than 175 domes and he has become an expert on the domes and the art form they contain. His forthcoming book, *Under*

*Glass: A Victorian Obsession*, will spotlight these wonderfully whimsical, and sometimes eccentric, creations.

**Wednesday, October 26, 2011 - at 7:15 P.M.** At Brittingham's Irish Pub and Restaurant, 640 East Germantown Pike, Lafayette Hill, Pennsylvania. (610)828-7351. John Fea on his new book to be released February 2011 **Was America Founded as a Christian Nation: A Historical Introduction.**

**Thursday, October 27, 2011 at 5:30pm, 7pm, 8:30pm \$50.00** --- at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200 <http://www.thelaurehillcemetery.org>

**Dining with the Dead** - Join us for a ghoully dining experience...

This package will include a buffet-style, catered, candlelit dinner and dessert inside Laurel Hill’s historic Gatehouse, followed by a flashlight walking tour through the National Historic Landmark Cemetery. Along the way, you’ll meet some of our most restless spirits, as portrayed by talented local actors.

Bring your own beer, wine and flashlights!

**Thursday, October 27, 2011**

**Mega-Bad Movie Night at the Academy of Natural Sciences**

<http://www.ansp.org/adult-programs/mega-bad-movie-night.php>

**Friday, October 28 & Saturday, October 29, 2011 at 7:00 PM** at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132. 215-228-8200 <http://www.thelaurehillcemetery.org>

**Halloween Flashlight Tours**

Laurel Hill Cemetery’s annual Halloween tours have become a mainstay of the season, but always have something new to offer. Guides will lead you along winding, dimly-lit pathways and through forests of grave-stones and sculptures, as you learn about the history of this enchanting site. Along the way, you’ll meet some of Laurel Hill’s most restless spirits, as portrayed by talented local actors.

Attendees are advised to wear comfortable shoes, and to bring a flashlight. After your tour, feast on an assortment of delicious cookies, hot apple cider and other spooky treats.

Hour-long tours will depart approximately every half-hour beginning at 7:00pm, and continuing until 9:30pm.

\$20.00

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.

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

**Mail checks to:**  
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**Glenside, PA 19038**

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

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

<b>Prizes awarded in 2010</b>	<b>= \$ 300.00</b>
<b>Prizes awarded in 2011</b>	<b>= \$ 500.00</b>
<b>Leftover prize from 2011 prizes</b>	<b>= \$ 28.00</b>
<b>New donations</b>	<b>= \$ 28.00</b>
<b>Total 2012 Prize Fund</b>	<b>= \$ 56.00</b>

**Please donate. Small contributions are preferred and donations in excess of the 2011 goal will be applied to the 2012 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. \$10 for students, email only. 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).

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

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