

**“You can’t get rich
in politics unless
you’re a crook.”
~Harry S. Truman**

Phactum

**The Newsletter and Propaganda Organ
of the Philadelphia Association for
Critical Thinking
July/August/September 2018**

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



Alfred Joyce Kilmer (1886 - 1918)

TREES

If you were to drive northbound on the New Jersey Turnpike past Exit 8A you will come upon the Joyce Kilmer Service Area. It is an OK rest area as highway rest areas go, it has the usual fast food purveyors, gasoline, and clean restrooms. What more could a motorist ask for?

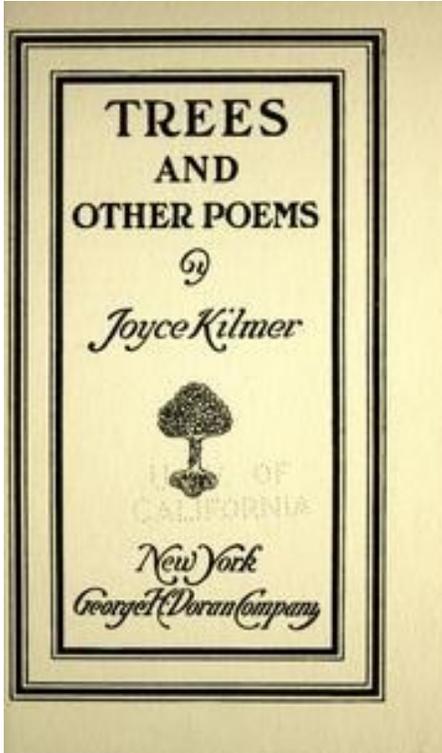
But why Joyce Kilmer? Who is he and what does it take for one to have the somewhat dubious honor of having a highway rest area bear ones name? The rest area does have a small plaque situated near the restrooms with his dates of birth and death and a fragment of his famous short poem, a mere six stanzas of rhymed couplets, “Trees”. But that was all.

Alfred Joyce Kilmer was born in New Brunswick, New Jersey on December 6, 1886, not terribly far from the aforementioned turnpike service

area. Kilmer was the youngest of four children; his mother, Annie Ellen Kilburn, a writer and composer; his father, Dr. Frederick Barnett Kilmer, a physician and chemist employed by Johnson & Johnson Company and was the inventor of J&J baby powder. He was named after two priests, Reverend Alfred Taylor and Reverend Elisha Brooks Joyce, at Christ Church, an Episcopal parish in New Brunswick where Alfred was baptized.

Kilmer attended Rutgers College, now Rutgers University, from 1904 to 1906 and then transferred to Columbia University where he completed his Bachelor of Arts degree in May of 1908. In June of 1908 he married Aline Murray, a poet he had met at Rutgers. They had five children, two of whom died before age eleven. The Kilmers' second child, Rose, was born in 1912 and shortly after birth was stricken with infantile paralysis and lost all use of her limbs. The Kilmers were devastated and at that time changed their religious faith to Roman Catholic.

Kilmer taught school for a year in New Jersey and began writing for various publications including *The Literary Digest*, *The New York Times*, and *The Nation*. The Kilmers relocated to New York City where he worked for Funk and Wagnalls where his job was to define words for a new edition of *The Standard Dictionary*. For his services he was paid the princely sum of \$0.05 per word defined.



Phactum Table Of Contents

Trees	p.	1
Upcoming PhACT Events	p.	5
Letters to the Editor	p.	7
Errors	p.	8
Various Ruminations	p.	8
April/May/June 2018 Meeting Reports	p.	17
At the Wagner Free Institute of Science	p.	22
John Locke— His Philosophy of Human Nature	p.	23
By Albert Fried-Cassorla		
Blue Bicycle Poetry	p.	25
By Albert Fried-Cassorla		
Can You Know GOD Without Religion?	p.	26
By Paul Schlueter III		
Another Anthropology Update	p.	29
PhACT Calendar	p.	31

Phactum's Roster of I.R.E. (Infamous Rational Errors)

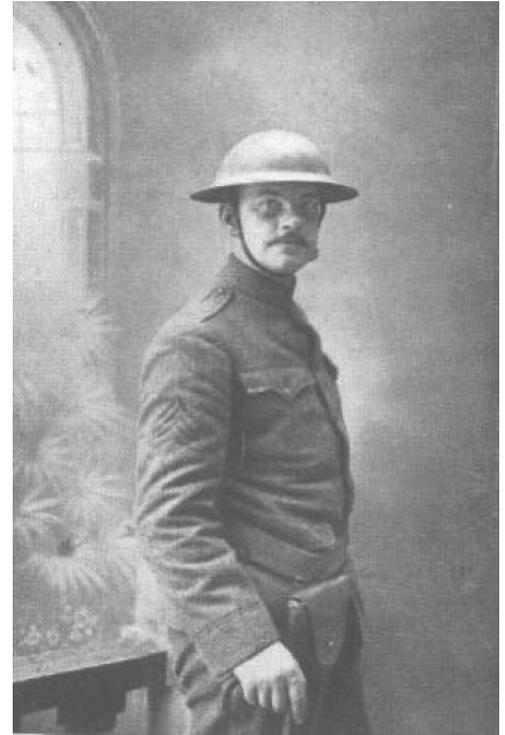
Phactum contributor Paul Schlueter III has accumulated over time a vocabulary listing of many of the egregious flaws of thinking, devious tactics of argument, and some pretty cool Latin phrases that might sound impressive used at a social gathering. This listing is nowhere near complete, but has been made into a pamphlet that is available free and only at PhACT Meetings.

Meeting attendees are invited to take one and are invited to participate in expanding the listing in the next edition as it is intended to be a collaborative project. Definitions and examples should be short and to the point and may be submitted to the *Phactum* editor at: phactpublicity@aol.com

New entry: **PROMISCUOUS QUESTIONING** - a pseudo-scientific strategy that seeks to cause the audience to infer desired viewpoints by way of tossing in numerous rhetorical questions without answering them with actual evidence. When questions are fired faster than they can be answered, little information is presented to the audience, so they form opinions based on ignorance and implication.

In 1913 Kilmer wrote a short poem, “Trees”, that propelled him to some considerable fame when released in a book of his collected poetry in 1914 entitled *Trees and Other Poems*. Kilmer was praised and also harshly criticized for his somewhat old fashioned style of writing. Nonetheless he continued to write. Around this time Kilmer became a well respected lecturer, in particular to Catholic audiences.

Meanwhile, in Europe, tensions were rising and in July 1914 hostilities erupted. President Wilson managed to keep America out of the struggle but was eventually forced to declare war, largely provoked by the German policy of sinking American merchant ships bound for England and for their attempts to draw Mexico into the war as an adversary of the United States. During that period of time Mexican revolutionary Pancho Villa was active and Mexican troops in January of 1916 attacked the town of Columbus, New Mexico killing 17 American citizens. President Wilson ordered an American Expeditionary Force of 10,000 soldiers under command of General John J. Pershing to capture Villa. Villa was elusive and in January 1917 President Wilson ordered abandonment of the mission. Were it not for hostilities in Europe the United States might well have engaged in war with Mexico.



Sergeant Alfred Joyce Kilmer

In April of 1917 the United States declared war against the German Empire and General Pershing was named as commander of the American Expeditionary Force. A few days later Kilmer enlisted in the Seventh Regiment of the New York National Guard. Kilmer was subsequently assigned to the U.S. 69th Infantry Regiment of the 42nd “Rainbow” Division in August of 1917 where he rose to rank of sergeant. Shortly before embarkation to Europe daughter Rose died and a few days later son Christopher was born.

The 69th Regiment, formed in 1849, fought valiantly during the Civil War. The regiment, also known as the Irish Regiment, acquired yet another name. the “Fighting Sixty Ninth”, a name coined by General Robert E. Lee because of their ferocious resistance and defeat of the famed Confederate Irish Regiment nicknamed Louisiana Tigers at the Battle of Malvern Hill. The regiment fought in many of the bloodiest battles of the Civil War including Antietam, Fredericksburg, Chancellorsville, and Gettysburg. Of 2000 regiments in the Union Army from 1861 to 1864 the Fighting Sixty Ninth had the 6th highest casualty rate. During the Civil War one war correspondent commented “When anything absurd, forlorn, or desperate was to be attempted, the Irish Brigade was called upon”. Appropriately the Fighting Sixty Ninth was present when General Lee surrendered to General Grant at Appomattox Court House, Va. Such was the nature of Joyce Kilmer’s regiment.

The regiment arrived in France in November 1917 at Rouge Bouquet forest during a relatively quiet time at that portion of the front. In March of 1918 the regiment came under heavy artillery bombardment suffering numerous casualties. Kilmer at that time sought more hazardous duty and was transferred to military intelligence and wrote to his wife, Aline, “Now I’m doing work I love-and work you may be proud of. None of the drudgery of soldiering, but a double share of glory and thrills.”

During the Second Battle of the Marne, the last major German offensive of the war, fighting was heavy. On July 30 Kilmer led a scouting party to find the position of a German machine gun. Kilmer’s comrades found him seemingly peering over a hill near Ourcq River but alas he had been shot by a sniper, a single bullet having pierced his brain. Kilmer was buried in the Oise-Aisne American Cemetery in France. He was posthumously awarded the Croix de Guerre by the French Republic.

Trees

By Joyce Kilmer

**I think that I shall never see
A poem lovely as a tree.**

**A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;**

**A tree that looks at God all day,
And lifts her leafy arms to pray;**

**A tree that may in summer wear
A nest of robins in her hair;**

**Upon whose bosom snow has lain;
Who intimately lives with rain.**

**Poems are made by fools like me,
But only God can make a tree.**

Note: This little poem was set to music in 1922 by American composer Oscar Rasbach. It has been performed and recorded by numerous popular and classical singers including Ernestine Schumann-Heink, John Charles Thomas, Nelson Eddy, Robert Merrill, Paul Robeson, Richard Tauber, Perry Como, Patty Page, The Platters, and Mario Lanza. Here is a version of that song by famed Philadelphia opera singer Mario Lanza.

<https://www.youtube.com/watch?v=BY6erFJbKXk>

UPCOMING 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 garage on 17th Street which is one way south bound. It opens at 1:00 PM and closes at 6:00 PM. This meeting site is handicap accessible. **PhACT Meetings are Free and open to the public unless otherwise noted.**

Lectures are generally at Community College of Philadelphia in Lecture Room C2-28 in the Center for Business and Industry at the corner of 18th and Callowhill Streets, at 2:00 PM, unless otherwise noted. **Please try to arrive a few minutes early as the College now requires that meeting attendees sign in for security reasons. ID must be shown.**



Saturday, September 15, 2018 at 2:00 PM. PhACT Lecture.
Come join us to kick off the 2019/2019 PhACT Lecture Series
Our first speaker of the season will be Rob Palmer. His topic will be:
An Introduction to the
Guerrilla Skepticism on Wikipedia (GSoW) Project.

Our speaker will be Skeptical Inquirer columnist **Rob Palmer**. His topic will be An Introduction to the Guerrilla Skepticism on Wikipedia (GSoW) project. Have you heard of the Guerrilla Skeptics? They are a dedicated team working on Wikipedia, battling conspiracy theories, alt-med, and pseudoscience, and improving the Skeptical and scientific information in the world's number one source of general knowledge. Though small in number, the team's work reaches tens of millions, in many languages. And their adversaries just can't stand them. In fact, GSoW has been publicly denounced by the likes of Gary Null, Rupert Sheldrake and Deepak Chopra. In his talk, Rob will explain the importance of both Wikipedia and the GSoW project to the Skeptical movement, provide numerous examples of the work of the GSoW team, and discuss the impact that their efforts make on the general public.



Rob Palmer has been a member of GSoW since 2016 and has made over 6,100 edits to the encyclopedia in that time, doing everything from adding skeptical and science-based material to existing articles, to writing brand new articles on a wide variety of topics of interest to the Skeptical movement. Rob's *Phactum* article about GSoW appeared in the April 2018 edition. Since May 2018, Rob has also been a columnist for the Skeptical Inquirer, writing under the banner "The Well-Known Skeptic." You can follow his work on FaceBook at TWKSkeptic.

Note that The **Science History Institute (formerly the Chemical Heritage Foundation)** located at 315 Chestnut Street, offers a free monthly Wiki salon for those interested in editing Wikipedia.

<http://www.sciencehistory.org>

(Continued on page 6)

Saturday, October 20, 2018 - PhACT Lecture.
Topic to Be Determined.

Saturday, November 17, 2018 - PhACT Lecture.

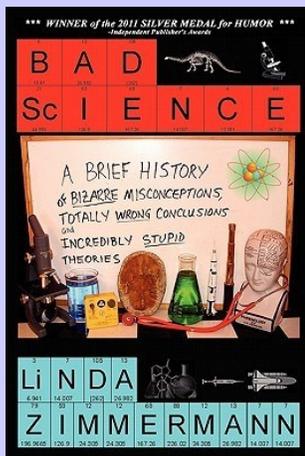
Our speaker will be Linda Zimmermann. Her topic will be her book:
***Bad Science: A Brief History of Bizarre Misconceptions,
 Totally Wrong Conclusions, and Incredibly Stupid Theories***

Bad Science examines the strange history of quack devices, alchemy, bloodletting, the worship of meteorites, faked data, secret testing, and the various trials and tribulations scientists have endured. The book was the winner of the Silver Medal for humor in the 2011 Independent Publisher Awards.

Linda's first career was as a Research Chemist for a medical diagnostics company. While working in the lab, she also went back to school for her Master's in English and began writing as a hobby. That hobby turned into a fulltime career, and she is currently the author of over 30 books on history, science, science fiction, and the paranormal. She has lectured across the country, including at the Smithsonian Institution, Mensa Conventions, and West Point. Linda has also been featured on several television shows in the U.S. and Canada, and on numerous radio programs.

Her lifelong love of science and her unique sense of humor culminated in her book "Bad Science: A Brief History of Bizarre Misconceptions, Totally Wrong Conclusions, and Incredibly Stupid Theories." The book won the 2011 Silver Medal for Humor in the Independent Publishers Awards, which drew 4,000 entries from around the world. Bad Science has also been translated into Polish. Linda lives in Orange County, New York, and she enjoys kayaking, cycling, hiking, geocaching, and cross country skiing.

Ω Ω Ω



Bad Science
 by Linda Zimmermann

Paperback: 224 pages

Publisher: Linda Zimmermann (January 25, 2011)

ISBN-10: 0979900247 ISBN-13: 978-0979900242

2011 Silver Medal Winner for Humor, from the Independent Publisher's Awards. Bad Science: A Brief History of Bizarre Misconceptions, Totally Wrong Conclusions, and Incredibly Stupid Theories takes a humorous look at bloodletting, alchemy, quack devices, the worship meteorites, faked data, secret testing on people, and all kinds of really ridiculous ideas. From the ancient Greeks to the present, the history of science has been fraught with persecution, fraud, and ignorance on a massive scale--but that doesn't mean we can't laugh about it!

Letters to the Editor

Letters and Rants to the Editor are encouraged.
Send to PhACTPublicity@aol.com

Editor: According to folklore, fern seeds could make the bearer invisible. In Shakespeare's *Henry IV, Part I* we read "We have the receipt of fern seed; we walk invisible." A skeptical character in this 16th century play replies to that claim "Nay, by my faith, I think you are more beholding to the night than to fern seed for your walking invisible."

It was once believed that all plants reproduced by seeds. Since no one ever saw a fern seed that was because it was invisible. And, by an extension of the doctrine of signatures, it was believed that the invisible fern seeds could make the bearer invisible! It is now known that ferns can reproduce vegetatively and sexually, such as, by a spore which, under the right conditions, could germinate into a gametophyte which, under the proper circumstances, can develop into a sporophyte, what is commonly thought of as a fern. Sori, which can be found on the underside of the pinnae of many ferns, are clusters of sporangia, which are containers of spores. Fern reproduction was poorly understood until the 19th century and the folkloric belief that fern seeds could make one invisible persisted into the early 20th century.

Ferns appear on every continent, except Antarctica, even in the rift between the North American and Eurasian tectonic plates (see photos).

Don Nigroni
Glenolden, PA



The Bridge between Continents over the rift between the North American and Eurasian tectonic plates, Iceland. Photograph taken by Don Nigroni on July 8, 2018.



Ferns in the rift between the North American and Eurasian tectonic plates below the Bridge between Continents, Iceland. Photograph taken by Don Nigroni on July 8, 2018.



Sori on a fern in the rift below the Bridge between Continents, Iceland. Photograph taken by Don Nigroni on July 8, 2018.

Errors

The bumbling *Phactum* editor had inserted several totally incorrect or misspelled names in the April/May/June 2018 edition.

The most egregious was to twice misidentify our September 2018 speaker as “Rob Porter”, not Rob Palmer which is his real name.

Actor Buddy Ebsen was misidentified as “Buddy Epsen”, and Turkish leader Mustafa Kemal Atatürk was wrongly called “Mustafa Kemal Atatür”.

The first two were outright errors and not misspelled, the last most likely spelling error via dropped “k”. Spell checker was not useful for any of these errors.

Additionally, GSoW was identified as Guerrilla Skeptics on Wikipedia but that is not exactly correct. It should have been Guerrilla **Skepticism** on Wikipedia.

Apologies to all. Please feel free to correct the editor on matters large and small.

Ω Ω Ω

Various Ruminations of Woo Woo and Real Science and some Gossip

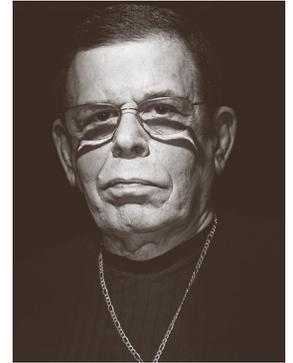
Collected/Written by Ray Haupt
(with help from others)

Art Bell, R.I.P.

Art Bell, a popular radio personality and aficionado of paranormal matters, died on April 13, 2018 at age 72.

Mr . Bell lived in the Nevada desert 65 miles from Las Vegas and from there he operated an in-home radio studio where he broadcast late at night to hundreds of stations in the United States and Canada. Purveyor’s of peculiar paranormal propositions were always welcome as guests and were treated with respect in that they were afforded a place to make their arguments without angry challenge or rebuke.

At one time Mr. Bell was the third most popular radio



Letters to the Editor and Other Thoughtful Correspondences are Highly Desired

If you have thoughts on some matter why not write down those thoughts and share with other *Phactum* readers? You have “writer’s block”, you say? Or perhaps fear of being criticized for poor writing skills? Anne Frank wrote when she was 13 years old. She was wrong about people not being interested in her musings. You can write too.

PhACT is critical of bad science but we are very tolerant of amateur writing. Please, express your ideas in your own writing style. . To sit down and write is a great way to hone writing skills and to refine ones critical thinking skills. Give it a try, devise a letter or article on some matter that bugs you or some issue that might be of interest to fellow skeptics. Articles, poetry, Letters and Rants to the Editor, suggestions to improve *Phactum*, items for the calendar, and other matters of interest are wanted. Feel free to denounce the Editor

Almost all topics are welcome - no partisan politics please.

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

“Writing in a diary is a really strange experience for someone like me. Not only because I’ve never written anything before, but also because it seems to me that later on neither I nor anyone else will be interested in the musings of a thirteen-year-old schoolgirl.”

~ Anne Frank

personality in the United States behind only Rush Limbaugh and Dr. Laura Schlessinger.

I had on a few rare occasions listened to Mr. Bell's program but not often enough to form solid opinions other than the subject matter usually seemed preposterous but conversation always was polite. The *New York Times* obituary said of Mr. Bell:

"While some critics accused him of laying the foundation for right-wing conspiracists on talk radio, Mr. Bell's politics were not easily pigeonholed. He described himself as a libertarian, but his passion was directed less at politicians or ideology than at debunking scientific doctrine and preaching apocalyptic prophecy."

By a somewhat spooky coincidence the day of Mr. Bell's passing was April 13 ... a Friday.

A news item from the Las Vegas Review-Journal, August 1, 2018, indicates that the coroner declared Bell's cause of death to be from legally prescribed prescription drugs. It was determined he had four prescription medications in his system: the opioids oxycodone and hydrocodone, diazepam (often marketed as Valium) and the muscle relaxant carisoprodol. Chronic obstructive pulmonary disease and hypertension also contributed to his death, the coroner's

office said.

Bad Advice 1

Buy Lunar Real Estate!

Bad Advice 2

"Ill customs and bad advice are seldom forgotten. "

~ Benjamin Franklin

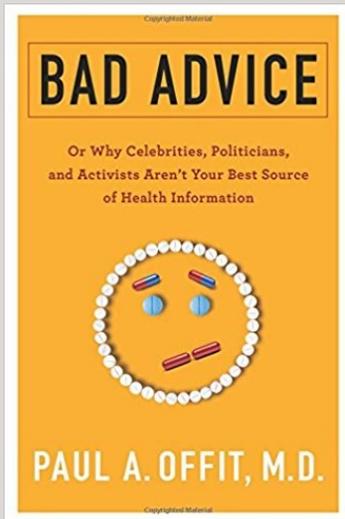
Bad Advice 3

Dr. Paul Offit, medical scientist, educator, and occasional PhACT speaker has written a new book entitled *Bad Advice*. See bottom of this page for more details.

Dr. Offit will be speaker at the College of Physicians on September 27. See the PhACT Calendar page 36.

Lectures at Eastern State Penitentiary

I have for the past several years been attending free lectures at Eastern State Penitentiary that deal with many aspects of the American prison system. Most are interesting, others less so, but the lecture on Tuesday, June 5, 2018 by Alisa Roth, a journalist, was outstanding for clarity and interest as she dealt with the history of incarceration in the United States and how the twin problems of criminal incarceration and the housing, or warehousing, of mentally



Bad Advice: Or Why Celebrities, Politicians, and Activists Aren't Your Best Source of Health Information by Paul Offit M.D.

Hardcover: 272 pages Publisher: Columbia University Press (June 19, 2018)
ISBN-10: 0231186983 ISBN-13: 978-0231186988

Science doesn't speak for itself. Neck-deep in work that can be messy and confounding and naïve in the ways of public communication, scientists are often unable to package their insights into the neat narratives that the public requires. Enter celebrities, advocates, lobbyists, and the funders behind them, who take advantage of scientists' reluctance to provide easy answers, flooding the media with misleading or incorrect claims about health risks. Amid this onslaught of spurious information, Americans are more confused than ever about what's good for them and what isn't.

In *Bad Advice*, Paul A. Offit shares hard-earned wisdom on the dos and don'ts of battling misinformation. For the past twenty years, Offit has been on the front lines in the fight for sound science and public health. Stepping into the media spotlight as few scientists have done—such as being one of the first to speak out against conspiracy theories linking vaccines to autism—he found himself in the crosshairs of powerful groups intent on promoting pseudoscience. *Bad Advice* discusses science and its adversaries: not just the manias stoked by slick charlatans and their miracle cures but also corrosive, dangerous ideologies such as Holocaust and climate-change denial. Written with wit and passion, Offit's often humorous guide to taking on quack experts and self-appointed activists is a must-read for any American disturbed by the uptick in politicized attacks on science.

ill individuals occur in the same facility. That has been a persistent flaw in our criminal justice system from the 18th century until the present.

Ms. Roth has written a book on this matter, the description of which may be found below.

Eastern State Penitentiary hosts a lecture at 6 PM on the first Tuesday of each month. The lectures are free, are followed by a reception, and are open to the general public. See the PhACT Calendar of events as a reminder.

Flat Earth Conference in Britain

PhACT member Tom Napier sent this little item about Britain's first Flat Earth Conference that occurred this past April in a hotel near Birmingham.

<http://metro.co.uk/2018/04/30/britains-first-flat-earth-conference-hears-final-definite-proof-gravity-doesnt-exist-7509101/?ito=cshare>

We are highly skeptical that any useful scientific knowledge has been imparted to physicists and the masses on this rather odd view of the Universe.



See page 14 for another Flat Earth matter.

Gambling Addiction Notes

On Monday, May 14, 2018 the United States Supreme Court ruled in the case of Murphy v. National Collegiate Athletic Association (NCAA) that a 1992 law, the Professional and Amateur Sports Protection Act, was unconstitutional

thus freeing the states to seek a new source of revenue by way of legal sports betting operations. The Murphy in this case is the current governor of New Jersey who wished to overturn the NCAA backed protective law.

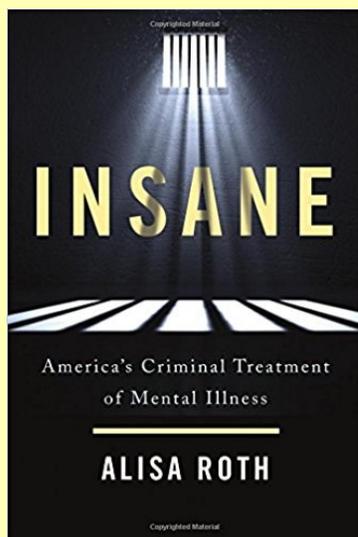


The states lost little time in their legislatures to establish this form of gambling. Delaware, the First State to ratify the US Constitution was also the First State to do enable sports betting.

Here are a few notes and links discussing the new sports betting mania in the United States.

♣♦♥♠ USA—New Jersey - Gaming industry prepares for legalization ahead of Supreme Court decision

Gamblers could take their pick - place their bets on sports games inside Atlantic City's seven current and two pending casinos, or at New Jersey racetracks, or online if the U.S. Supreme Court strikes down the 25-year ban on sports



Insane: America's Criminal Treatment of Mental Illness By Alisa Roth

Hardcover: 320 pages Publisher: Basic Books (April 3, 2018)
ISBN-10: 0465094198 ISBN-13: 978-0465094196

An urgent exposé of the mental health crisis in our courts, jails, and prisons America has made mental illness a crime. Jails in New York, Los Angeles, and Chicago each house more people with mental illnesses than any hospital. As many as half of all people in America's jails and prisons have a psychiatric disorder. One in four fatal police shootings involves a person with such disorders.

In this revelatory book, journalist Alisa Roth goes deep inside the criminal justice system to show how and why it has become a warehouse where inmates are denied proper treatment, abused, and punished in ways that make them sicker.

Through intimate stories of people in the system and those trying to fix it, Roth reveals the hidden forces behind this crisis and suggests how a fairer and more humane approach might look. *Insane* is a galvanizing wake-up call for criminal justice reformers and anyone concerned about the plight of our most vulnerable.

betting outside Nevada. Some Atlantic City tourists on the boardwalk are optimistic about the effects of legal sports betting. "Because you went from 12 to seven casinos, and Atlantic City could probably use the additional revenue and the additional attraction," said tourist Gene Graney.

The American Gaming Association partially agrees. "The integrity of the game is of utmost importance, not just to the sports leagues and the athletes competing in them, but also the gaming operators. At the end of the day, we have as much to lose, if not more, if there's an issue with the integrity of the game that we are taking wagers on as they do," said Casey Clark, vice president of strategic communications for the American Gaming Association.

Read article: <https://www.njtvonline.org/news/video/gaming-industry-prepares-for-legalization-ahead-of-supreme-court-decision/>

♣♦♥♠ USA - Supreme Court allows states to legalize sports betting, opening floodgates for online gambling profits

In a six-to-three decision (Justice Breyer was a partial dissent), Supreme Court Justices struck down a federal law that had banned gambling on sporting events in most states. The implications of this for state tax revenues, and around arguments for making significant changes to the ways college athletes are compensated (or should be compensated), are huge, but clear winners from this ruling are the online betting companies... or any media company that has any sort of exposure to live-streaming sporting events.

DraftKings and FanDuel seem like clear early winners, but really there's a market for Facebook, Twitter, YouTube and the major networks that hold sports broadcasting rights to open up new sources of revenue. For the two leaders in online sports betting, the decision is a new lease on life - although both companies had argued that they were games of skill and not chance, and should not be regulated as odds-based gambling companies.

Read article: <https://techcrunch.com/2018/05/14/supreme-court-allows-states-to-legalize-sports-betting-opening-floodgates-for-online-gambling-profits/>

♣♦♥♠ USA—New Jersey - What the Supreme Court's sports gambling decision means

New Jersey has been preparing in earnest for legalized sports wagering since 2012, and many locations are ready to move quickly. Monmouth Park - a racetrack on the Jersey Shore - says it could open betting windows within the next two weeks. Casino operators in New Jersey have been anticipating Monday's decision for months and much of the infrastructure is already in place. Many other state legislatures will now race to add regulation that will provide the legal framework for sports gambling in each state.

The Supreme Court opinion means states can offer the same betting options as any other sports books, including college and professional sports, horse

racings, golf, combat sports and non-American sporting events.

Read article: [https://www.washingtonpost.com/news/sports/wp/2018/05/14/what-the-supreme-courts-sports-gambling-decision-means/?](https://www.washingtonpost.com/news/sports/wp/2018/05/14/what-the-supreme-courts-sports-gambling-decision-means/)

♣♦♥♠ USA—Massachusetts- Gambling foe warns legal betting will change how fans watch sports

An anti-gambling advocate is warning that a massive influx of legal sports betting will fundamentally alter how Bay State sports fans watch games - and suck money from their pockets. "Massachusetts is fanatic about our sports. This is going to encourage citizens to get fleeced," said Les Bernal, the national director of activist group Stop Predatory Gambling. "Instead of people rooting for the Patriots and the Red Sox, a generation of kids will be growing up saying, 'What are the odds on the game?' It's a huge transformation in getting young people hooked on gambling

Read article:

http://www.bostonherald.com/news/local_coverage/2018/05/gambling-foe-warns-legal-betting-will-change-how-fans-watch-sports

♣♦♥♠ USA - Will legalization of sports betting end gambling scandals?

In the notorious Black Sox case, members of the Chicago White Sox were accused of taking bribes to lose the 1919 World Series to the Cincinnati Reds. Eight players were banned from the game for life.

The Black Sox case may be the best known, but a number of gambling scandals have shaken American sports periodically over the years, including some that have hit close to home, like the basketball scandal at Boston College in the late 1970s and the football scandal there in the mid-1990s. So what will happen now that the Supreme Court has legalized sports gambling in the states?

"On the one hand, pushing the market for sports gambling into the public domain seems to eradicate black markets and move it away from a system of corruption," said Marc Edelman, a professor of law at Baruch College Zicklin School of Business in New York who consults extensively on sports and gaming law. "On the other hand, more people are likely to participate, and as a marketplace grows in size, it becomes more likely there will be a scandal."

Read article: <https://www.bostonglobe.com/metro/2018/05/15/will-legalization-sports-betting-end-gambling-scandals/1YxQCNQaUTxGdTtu3AhXJO/story.html>

♣♦♥♠ USA - Metta World Peace claims he was offered money to fix games in college

When news broke on Monday that the United States Supreme Court had paved the way for legalized sports gambling in America, one of the biggest unknowns was the impact this will have on athletes. While promoting his new

book, "No Malice: My Life in Basketball or: How a Kid from Queensbridge Survived the Streets, the Brawls, and Himself to Become an NBA Champion," former Los Angeles Lakers forward Metta World Peace, formerly known as Ron Artest, told Yahoo Sports about the widespread ramifications that Monday's ruling could have on professional and collegiate athletes. Any number of bettors approached him with some version of, "Hey, you won me a lot of money," and while most may have been innocent enough, outside of broaching a taboo subject for NBA players, there were those who looked to prey on underprivileged athletes. "Bullies," World Peace called them. One offered \$35,000 to fix a game

Read article: <https://uk.news.yahoo.com/metta-world-peace-says-someone-offered-35000-fix-games-college-221813836.html?guccounter=1>

♣♦♥♠ USA - Americans lost \$107B legally gambling last year

Americans lose billions of dollars a year on sports betting but stand to lose billions more if such wagers become commonplace nationwide.

That does not include unlicensed or "black market" activities. Sports betting's aggregate losses - after wins are taken into account - are estimated to account for just \$209 million of that in 2018, but will hit \$7.5 billion in 2030, if it becomes legal nationwide.

Les Bernal, national director of Stop Predatory Gambling, a Washington, DC-based nonprofit group, said state gambling operators are exempt from truth-in-advertising laws. (Hence, TV commercials like "The Possibilities are Endless.") Bernal said sports gambling will help bring gambling to young Americans. "The type of advertising we've seen with lotteries and casinos, you'll see that more aggressively for sports betting," he said. "Teams wear jerseys emblazoned with sports betting patches on their uniforms."

"I think that it is much more likely that the reports of flying saucers are the results of the known irrational characteristics of terrestrial intelligence than of the unknown rational efforts of extra-terrestrial intelligence."



Richard Feynman, (1918-1988), American theoretical physicist

Read article: <https://nypost.com/2018/05/16/americans-lost-107b-legally-gambling-last-year/>

♣♦♥♠ USA—Arizona - Recovering addicts wonder what's next for legal gambling in Arizona

Some local businesses in southern Arizona hope to cash in on however the state handles legalized sports betting but recovering gambling addicts have mixed feelings about it. Several members of Tucson's chapter of Gamblers Anonymous spoke with Tucson News. One man stated that he, personally, wasn't concerned about any new outlets for gambling, but he worried that it may create new problem gamblers. Another recovering addict stated that she opposes any sort of additional gambling options in Arizona because she's afraid that some people don't know when to stop.

Read article: <http://www.tucsonnewsnow.com/story/38205040/recovering-addicts-wonder-whats-next-for-legal-gambling-in-arizona>

Dr. Stephen Barrett Reports in Consumer Health Digest

Dr. Barrett's weekly newsletter, *Consumer Health Digest*, is free and available to all who wish to subscribe. To subscribe send a blank email to:
chd-subscribe@lists.quackwatch.org

▶▶ CFI calls for consumer protection against homeopathy (April 8, 2018)

The Center for Inquiry has submitted comments to the Food and Drug Administration (<https://www.centerforinquiry.net/docs/FDA-2017-D-6580%20Comments%20of%20CFI.pdf>) calling for a much firmer stance on the manufacture and marketing of homeopathic products than provided in draft guidelines released several months ago. In a press release, CSI asserts:

We enthusiastically support the FDA coming down hard on homeopathy where the products are tainted or sold as miracle cures for fatal diseases. . . . But that's not nearly enough. Americans waste billions of dollars every year on homeopathic sugar pills. The FDA has a duty not just to those poisoned by homeopathy, but also to those fleeced of their hard earned dollars. [FDA has a duty to crack down on homeopathic fake medicine, says Center for Inquiry. CFI press release, March 26, 2018]

Professor Edzard Ernst has noted the CFI litigation comments that the CFI lawsuit is clear and speaks for itself. He congratulates CFI and expresses hope that other organizations around the world will follow suit:

<https://edzardernst.com/2018/07/center-for-inquiry-sues-drug-retailer-for-fraud-over-sale-of-homeopathic-medicine/>

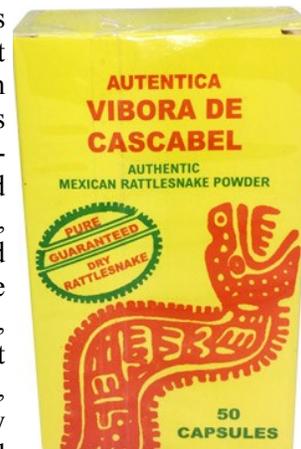
▶▶ UK health agency renews fluoridation support (April 15, 2018)

Public Health England has issued a new monitoring report about water fluoridation in some parts of England. It concludes that water fluoridation is a safe and effective public health measure to reduce dental decay. [Public Health England. Water Fluoridation Health Monitoring Report for England 2018. https://www.dentalwatch.org/fl/uk_2018.pdf PHE Publications, Gateway Number 2017777, March 2018.] The report's summary for laypersons states:

- ◆ Five-year olds in fluoridated areas were much less likely to experience tooth decay, and less likely to experience more severe decay than in non-fluoridated areas.
- ◆ The chances of needing tooth removal at a hospital because of decay were also much lower in fluoridated areas.
- ◆ Children from both affluent and economically deprived areas benefited from fluoridation, but children from relatively deprived areas benefited the most.
- ◆ Dental fluorosis (mottling of teeth), at a level that might affect the appearance of teeth, was observed in 10% of children/young people examined in two fluoridated cities. However, there was no difference in concerns about appearance between those in fluoridated and non-fluoridated cities.
- ◆ The researchers found no convincing evidence that fluoridation produced higher rates of hip fracture, Down's syndrome, kidney stones, bladder cancer, or osteosarcoma (a bone cancer).

▶▶ Salmonella infection linked to rattlesnake pills (May 20, 2018)

The U.S. Centers for Disease Control and Prevention has published the first case report linking a Kansas patient's infection with the Oranienburg species variant of Salmonella to consumption of rattlesnake pills purchased in Chihuahua, Mexico. The pills, which are made of encapsulated dehydrated rattlesnake meat, are marketed in health food stores, roadside markets, and via Internet as remedies for various conditions, ranging from cancer to acne. They are not approved by the Food and Drug Administration and are sometimes labeled by the manufacturer as "natural." Rattlesnake pills have been previously implicated in outbreaks of Salmonella infections, mostly from the arizonae species variant. Persons with a compromised immune system are at greatest risk for life-threatening illnesses from Salmonella infections. [Notes from the Field: Salmonella Oranienburg Infection Linked to Consumption of Rattlesnake Pills — Kansas and Texas, 2017. Morbidity and Mortality Weekly Report, May 4, 2018] <https://www.cdc.gov/mmwr/volumes/67/wr/mm6717a4.htm>



End Times Watch

We reported in the April 2018 *Phactum* that the World would End on April 23. It didn't.

See: <http://www.foxnews.com/science/2018/04/11/biblical-prophecy-claims-rapture-is-coming-april-23-numerologist-says.html>

The End of Times has been rescheduled for September 23. Stay tuned to this channel. We will tell you in the October edition if the World had ended in September in case you missed it. Meanwhile here is the scoop on the upcoming Apocalypse:

<https://www.thesun.co.uk/tech/4474635/end-of-the-world-september-23-planet-x-nibiru-david-meade-armageddon/>



▶▶ Accusation filed against M.D. promoter of "homeopathic" audio (May 27, 2018)

The Medical Board of California has accused homeopath William Edwin Gray III, M.D. with unprofessional conduct, gross negligence, and/or repeated negligent acts related to his marketing of sound files he calls "eRemedies." According to Gray's Web site:

- ◆ His eRemedies are created by the extracting "energetic signals" in homeopathic remedies with a device consisting of a simple coil connected to an amplifier and digitizer and storing the resulting signals as .wav or MP3 files.
- ◆ Each product is a 13-second hissing sound that "contains frequencies unique to each chosen eRemedy" and "can bring rapid relief to acute ailments, simply by playing the MP3 file on a cellphone or computer."
- ◆ eRemedies are effective in treating anxiety/panic/phobia; back pain; bites and stings; bladder infection; cholera; cough; diarrhea; earache; fever; grief; head injury; headache; infant colic; influenza; injury; labor delivery;

malaria; menstrual pain; pet abscess; pet bladder infection; teething, toothache; and typhoid.

- ◆ In 2014, 3 out of 3 cases of Ebola were cured via cellphones simply by playing the appropriate eRemedy several times in an hour.

The medical board's accusation states that Gray (a) failed to register his offerings with the FDA, (b) lacked evidence that homeopathic remedies can be transmitted electronically via sound waves, (c) was marketing remedies not eligible for over-the-counter status, (d) was negligent by not examining patients to whom he sold products, and (e) had practiced in 2016 and 2017 even though his medical license status was delinquent.

Gray, who graduated from Stanford University Medical School in 1970, has practiced and taught homeopathy throughout nearly all of his medical career. In 2003, the FDA warned him, doing business as Bill Gray Medical Corp, to stop claiming that "Dr. Gray's Smallpox Shield" (a homeopathic product) could prevent smallpox despite direct exposure, had been proven in smallpox epidemics throughout

The Earth is Flat!!

PhACT's Vice President, Eric Krieg, was at a 4th of July parade in Skippack, PA. That area is still somewhat rural and the parade reflected that as antique tractors and farming promotion groups passed by. Then there was a float from Research Flat Earth that was inviting parade watchers to take pictures. So Eric did.

Eric states, "among the comments I heard was other people scrambling to take pictures because they couldn't believe it either and one lady I overheard said, 'well I guess anyone who can pay a fee can get into this parade'. Interestingly enough as it went along there's one young man walking along the side it between him and the crowd repeating over and over 'don't bother looking at it it's complete nonsense don't believe this crap'.

The crowd reaction is somewhat reassuring.

Eric observed, "I particularly found it interesting that they had listed over 200 proofs that the Earth is flat. One thing that Neil deGrasse Tyson asks about these people is why did they believe that all the other planets are round as we can see them in a telescope but just not earth? For anyone amused by looking into this unbelievable ability to stay in denial you can see videos of Flat Earth proponents explaining that everything we supposedly see from the space station is just manufactured videos. The theory to me gets most amusing when it tries to explain what would have to be a massive conspiracy by many thousands of scientists all over the world for more than century "

This group has an elaborate website www.flatearth101.com for hawking their philosophy, various goods such as tee shirts, and unsurprisingly meetups and conferences. A Facebook site does exist for a Flat Earth group in Manheim, PA and there is also one in New Jersey. On November 15/16, 2018 the Flat Earth International Conference will occur in Denver, Colorado. If the organization has a US Mail address it remains a mystery to me and I saw no individual name who might be an official.

Flat Earth enthusiasts are invited to participate in *Phactum*. Contact the Editor at phactpublicity@aol.com.



the world, and was completely safe. The Los Angeles Times has reported that Gray does not plan to contest the current allegations because he practices homeopathy full-time and doesn't believe he needs a medical license to continue doing that. [Karlamañgla S. A California doctor is selling hissing sounds to patients. The medical board isn't buying it. Los Angeles Times, May 25, 2018]

<http://www.latimes.com/local/california/la-me-ln-doctor-license-threat-20180524-story.html>

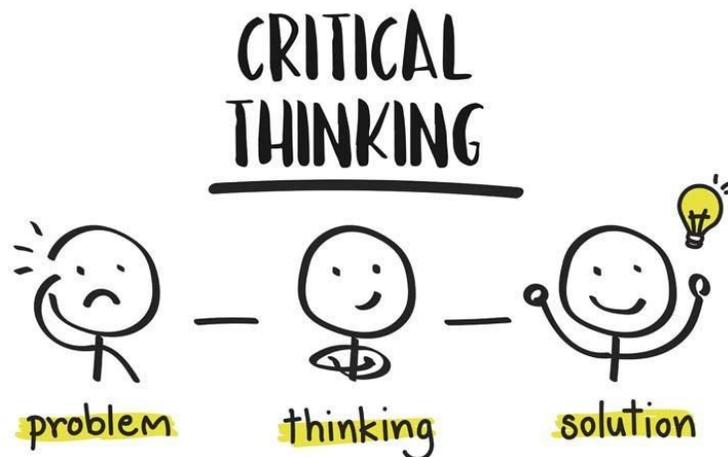
Critical Thinking

Dr. Edzard Ernst is Professor Emeritus of Complementary and Alternative Medicine, formerly at Exeter University in the United Kingdom. Do not let the academic title fool you, he is not a CAM purveyor but instead is keen to evaluate all manner of alternative medicine claims in order to determine usefulness of the claim. Dr. Ernst is a prolific writer of books, peer reviewed articles, and he has an interesting blog site:

<https://www.edzardernst.com>

At his blog, Professor Ernst has an entry on June 23, 2018 entitled “**Critical Thinking, The Ability To Differentiate The Useful From The Worthless**”. Presumably this short blog post will be of interest to those of us who fancy ourselves as Critical Thinkers.

<https://edzardernst.com/2018/06/critical-thinking-the-ability-to-differentiate-the-useful-from-the-worthless/>



In that blog entry he states:

“Critical thinking means making decisions and judgements based on (often confusing) evidence. According to the ‘National Council for Excellence in Critical Thinking’ it is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.”

To throw bombs from an airplane will do as much damage as throwing bags of flour. It will be my pleasure to stand on the bridge of any ship while it is attacked by airplanes.

Newton D. Baker

Newton D. Baker (1871-1937) was the US Secretary of War serving under President Woodrow Wilson from 1916 to 1921. Baker was a graduate of Johns Hopkins University and Washington and Lee University Law School. He was a successful lawyer and became City Solicitor of Cleveland, Ohio ifrom 1901 to 1909. He was elected Mayor of Cleveland, Ohio in 1912. Baker never served in the US military as he was rejected by the army for poor eyesight. A friend of President Wilson since college days at Johns Hopkins, Baker was nominated to the post of Secretary of War. Despite lack of military experience Baker was considered acceptable by supporters and opponents of American entry into the Great War.

Baker was one of several Wilson appointees who were enthusiasts for the economic theories of 19th century American political philosopher Henry George. Wilson hoped that Baker would one day follow him into the White House as President. Indeed, in 1932 Baker attempted to secure the Democratic nomination for President but lost to Franklin Delano Roosevelt.



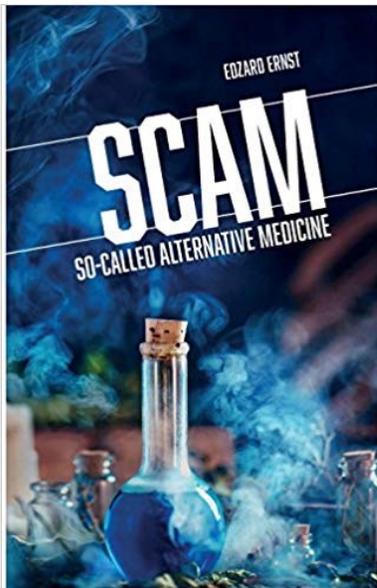
Dr. Ernst asserts that we are not born with Critical Thinking skills, but those skills can be taught. He presents studies to support that assertion and states:

”The most important finding, however, is clearly that critical thinking can be taught.

That must be good news! As discussed previously, critical thinkers experience fewer bad things in

life than those of us who do not have acquired that skill. This cannot come as a surprise – being able to tell useful concepts from worthless ones should achieve exactly that.”

Ω Ω Ω



SCAM: So-Called Alternative Medicine by Edzard Ernst

Publisher: Societas; 1 edition (June 1, 2018) Paperback: 220 pages
ISBN-10: 1845409701 ISBN-13: 978-1845409708

So-called alternative medicine (SCAM) is popular and therefore important, no matter whether we love or loathe it. Consequently, an impressive number of books about SCAM are already available. Most of them, however, are woefully uncritical, overtly promotional and dangerously misleading.

Not so this one!

This book was written by someone who received SCAM as a patient, practised SCAM as a doctor, and researched SCAM as a scientist. It provides an insider's perspective by covering aspects of SCAM which most other books avoid, and by questioning the many tacitly accepted assumptions and wild extrapolations that underpin SCAM. The text is factual, occasionally dosed with a touch of humour or satire. The aim is not only to inform but also to entertain.

It is written principally for members of the general public who have an interest in healthcare and are tired of the promotional counter-knowledge produced by SCAM enthusiasts. It is an exercise in critical thinking that might prevent you from wasting your money on (or endangering your health with) bogus treatments.

More Harm than Good?: The Moral Maze of Complementary and Alternative Medicine by Edzard Ernst and Kevin Smith

Publisher: Springer; (February 14, 2018) Paperback: 223 pages
ISBN-10: 3319699407 ISBN-13: 978-3319699400

This book reveals the numerous ways in which moral, ethical and legal principles are being violated by those who provide, recommend or sell ‘complementary and alternative medicine’ (CAM). The book analyses both academic literature and internet sources that promote CAM. Additionally the book presents a number of brief scenarios, both hypothetical and real-life, about individuals who use CAM or who fall prey to ethically dubious CAM practitioners. The events and conundrums described in these scenarios could happen to almost anyone. Professor emeritus of complementary medicine Edzard Ernst together with bioethicist Kevin Smith provide a thorough and authoritative ethical analysis of a range of CAM modalities, including acupuncture, chiropractic, herbalism, and homeopathy. This book could and should interest all medical professionals who have contact to complementary medicine and will be an invaluable reference for patients deliberating which course of treatment to adopt.



Meeting Reports - April/May/June 2018

Reported by by Nicolas Bugueno, a Physics student of Dr. David Cattell at Community College of Philadelphia.

Dr. Rob Brotherton, a psychologist, discussed “Hip Hop and the Illuminati”: Saturday, April 21, 2018 at 2:00 PM.

Reported by Nicolas Bugueno

During this month's PhACT meeting on Saturday, April 27, 2018, Dr. Rob Brotherton gave a presentation about Hip-Hop and the Illuminati. Usually represented by the visual allegiance of forming a triangle with both hands or a hook over the eye with one hand, the Illuminati has risen to popularity alongside the rise of Hip-Hop music. With many Hip-Hop artists having made references to the Illuminati, Dr. Brotherton showed how these different artists incorporated the usage of the Illuminati in their songs.

Founded in 1776, the Illuminati's roots trace back to a real secret society. Adam Weishaupt, who was the founder, had experience with other similar groups but sought to form a more secret society with different goals. This mainly included trying to shape society, through the government, to their views (e.g., replace Christianity with a religion of reason). The society did flourish in attaining new members but faced pushback from the Bavarian government. Despite Weishaupt's attempts to reverse the government's stance, it failed and the society was banned in 1785. This led to Weishaupt being stripped of his academic position and banished from Bavaria. Other members were imprisoned or driven from their homes. Historical records contain no further records of the Illuminati after 1785, indicating that they most likely disbanded. However, with the 1789 French Revolution the society once again rose into the public's view. Many French writers accused the society of being responsible for the revolution and that it had and was still operating. Switching now to America, George Washington directly addressed the Illuminati's existence and his goal to limit the effects they would have on the formation of America. In 1995, Prodigy, a hip-hop artist, directly referenced the Illuminati in one of his songs. Since this time, more artists (e.g., Jay-Z, Talib Kweli, Wise Intelligent, Kanye West, etc.) have gotten inspiration from this song and have referenced the Illuminati in their own songs. Dr. Brotherton alludes to the fact that Black Americans have more reasons to distrust the government and is why these songs reference the society.

In conclusion, Dr. Brotherton's presentation highlighted how the idea of a secret society (i.e, the Illuminati) influenced hip-hop music. This is a genre of music that allows an artist to speak their minds and concerns, one of which is the distrust in the government. The large contribution Black Americans have on this type of music is, therefore, represented through their history of racial injustice by the government and how the Illuminati or, specifically, racism still hides secretly in today's society.

“Thus it happens in matters of state; for knowing afar off (which it is only given a prudent man to do) the evils that are brewing, they are easily cured. But when, for want of such knowledge, they are allowed to grow so that everyone can recognize them, there is no longer any remedy to be found.”

~ Niccolo Machiavelli (1469-1527) Italian Statesman and Political Philosopher

Suspicious Minds: Why We Believe Conspiracy Theories

By Rob Brotherton

Publisher: Bloomsbury USA **Publication date:** 01/03/2017
Paperback: 304 pages
ISBN-13: 9781472915634

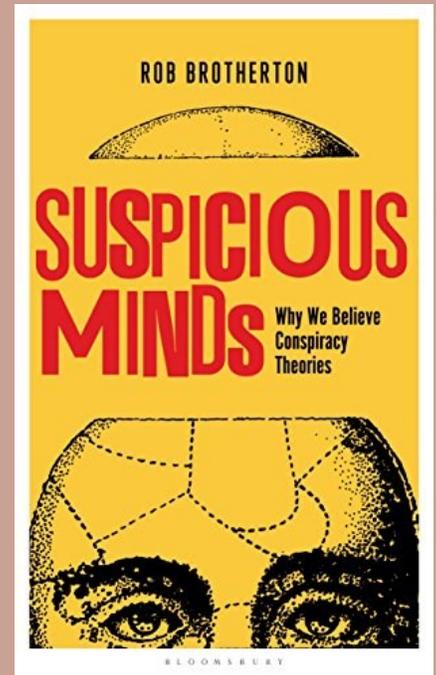
We're all conspiracy theorists. Some of us just hide it better than others.

Conspiracy theorists do not wear tin-foil hats (for the most part). They are not just a few kooks lurking on the paranoid fringes of society with bizarre ideas about shape-shifting reptilian aliens running society in secret. They walk among us. They are us.

Everyone loves a good conspiracy. Yet conspiracy theories are not a recent invention. And they are not always a harmless curiosity. In *Suspicious Minds*, Rob Brotherton explores the history and consequences of conspiracism, and delves into the research that offers insights into why so many of us are drawn to implausible, unproven and unproveable conspiracy theories. They resonate with some of our brain's built-in quirks and foibles, and tap into some of our deepest desires, fears, and assumptions about the world.

The fascinating and often surprising psychology of conspiracy theories tells us a lot – not just why we are drawn to theories about sinister schemes, but about how our minds are wired and, indeed, why we believe anything at all. Conspiracy theories are not some psychological aberration – they're a predictable product of how brains work. This book will tell you why, and what it means.

Of course, just because your brain's biased doesn't always mean you're wrong. Sometimes conspiracies are real. Sometimes, paranoia is prudent



"Thanks to the internet it is now possible to be extremely well informed and completely wrong at the same time!"

PhACT Expedition to Laurel Hill Cemetery Saturday, May 19, 2018



The obelisk of Catharine Drinkhouse Smith, a “devoted spiritualist and one of the best mediums of her time” and her husband Levi Franklin Smith, also a spiritualism devotee.

Saturday, May 19 was a gloomy rainy day but by 2 PM the gods smiled upon PhACT Explorers for a trek through the beautiful 19th century Laurel Hill Cemetery. There were a few drops falling from the heavens, but it was not significant and remained so for the next two hours. The ground was wet and one needed to be well shod to avoid wet toes and care had to be taken on uneven ground to avoid wood-chuck and fox holes. There is a population of red fox at the cemetery. Kim and Eric were the fortunate alert Explorers to see one.



Michael Brooks telling fascinated PhACT members of the history of spiritualist Henry Sybert, whose grave marker is seen at left.



The Wharton family plot.



The deceased rest peacefully on a hill above the serene Schuylkill River.



The marker of Robert Ralston Smith is engraved with rocks, ivy and an urn, all examples of Victorian era symbolism.

We wandered about the cemetery guided by retired Professor of English Michael Brooks of West Chester University. Doctor Brooks has written two books which are described on pages 21 and 22.



Michael Brooks at the grave of sportscaster Harry Kalas. The chairs are from Veterans Stadium



The tombstone of Major General George Gordon Meade (1815-1872), a hero of the Civil War.

The cemetery, founded in 1836, is quite elaborate, filled with sculpture and the remains of well over 100,000 Philadelphians, many with interesting and sometimes outrageous stories. The cemetery offers many interesting tours all of which are listed in the *Phactum* Calendar.

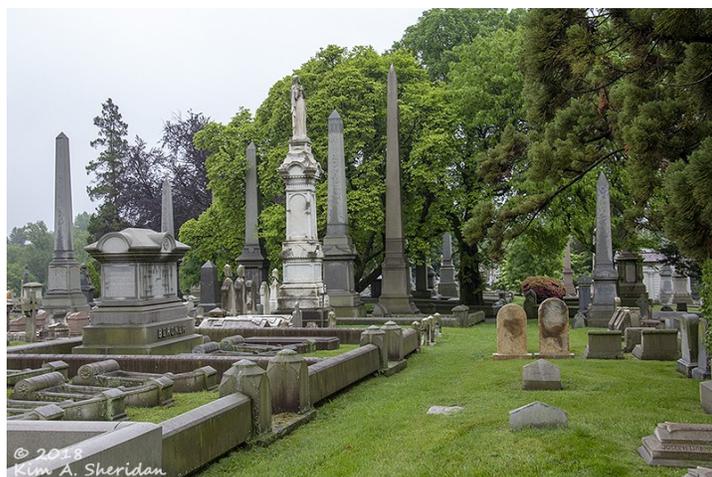


PhACT members listen raptly to the tale of General Meade.

We must report a wonderful day but once again PhACT Explorers failed to sight or capture a single ghost or other world spirit who inhabits this picturesque place overlooking the Schuylkill River running through beautiful Fairmount Park. We are undeterred and we are sure that Don Nigrone, our Fearless Expedition Leader, is devising a plan to detect and apprehend a denizen of the spirit world or a wild cryptid during the 2019 adventure. Stay tuned..

Kim Sheridan, our capable wildlife photographer, was on hand to provide documentary images of our adventure but, alas, did not manage to photograph the fox or a wandering phantom.

Ω Ω Ω



Laurel Hill Cemetery is a labyrinth of obelisks, gravestones, statuary, cradle graves and mausoleums.



The memorial to baby William Warner, who lived just one day, depicts an angel releasing young William's spirit from the coffin. Infant and child mortality was high in the 1800s.

Laurel Hill Cemetery (Images of America)

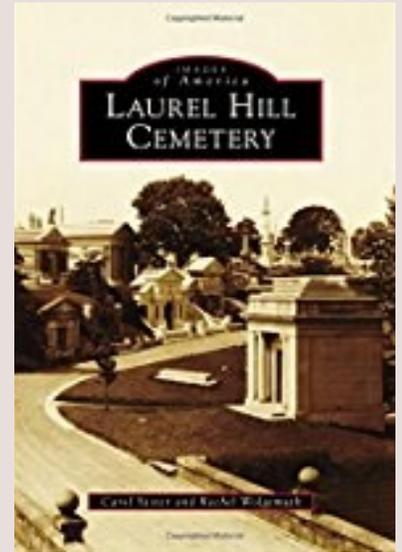
by Carol Yaster and Rachel Wolgemuth

· **Publisher:** Arcadia Publishing (August 7, 2017)

· **Paperback:** 128 pages

· **ISBN-10:** 1467126551 **ISBN-13:** 978-1467126557

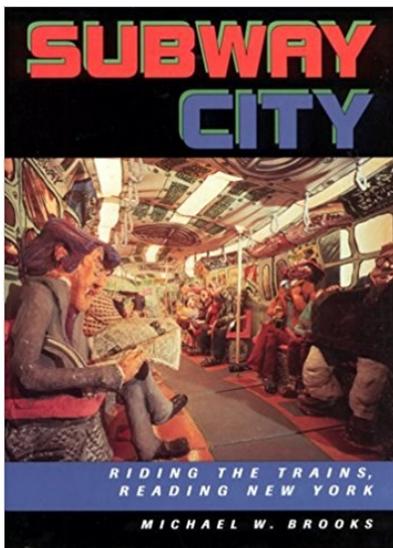
Established in 1836, Philadelphia's Laurel Hill Cemetery was one of the earliest rural cemeteries in America. The picturesque views and outstanding horticulture, along with sculptures and monuments designed by notable artists and architects—like Alexander Milne Calder, Alexander Stirling Calder, Harriet Frishmuth, John Notman, and Thomas Ustick Walter—attracted thousands of visitors. Laurel Hill became the desired place of burial for Philadelphia's elite and the final resting place for those with last names like Widener, Wharton, Meade, and Elkins. The cemetery's design was much admired and widely imitated, both locally and nationally. While the 20th century ushered in a steep decline for Laurel Hill, the establishment of a friends group in 1978 and the cemetery's designation as a National Historic Landmark in 1998 signaled a transformation for the cemetery. Laurel Hill entered a new century as a revitalized and relevant institution. Once again, the cemetery is regarded as an important part of the community, a worthy destination for visitors, and a place to share in the stories of the men and women whose lives shaped both Philadelphia and the nation



The authors: Carol Yaster is the president of the Friends of Laurel Hill Cemetery. Rachel Wolgemuth is an author and historian with a background in cemetery research.

Subway City: Riding the Trains, Reading New York

By Professor Michael Brooks



Hardcover: 272 pages

Publisher: Rutgers University Press; 1st edition (June 1, 1997)

ISBN-10: 0813523966 **ISBN-13:** 978-0813523965

None of the world's great cities is as closely identified with its subway as New York. Its trains provide much more than just rapid transit. They give New Yorkers a powerful symbol of their metropolis, one that they use to express both their hopes and their fears for the urban future.

Subway City explores New York's transit system as both fact and metaphor. Brooks traces the development of the subway from its inception as the newest and most efficient public transportation system to its decline as an overcrowded and dangerous part of city life. The crowded cars gave Harold Lloyd material for comedy, fueled William Randolph Hearst's crusade against the Traction Trust, and convinced Lewis Mumford that the subway was a futile effort to solve the city's problems. Brooks explores films which have dramatized the dangers lurking below ground, and examines the infamous Bernhard Goetz shooting that made the subway a symbol of urban decay. More hopefully, he describes the Metropolitan Transportation Authority's station improvements and ambitious programs for Music Underground, Poetry in Transit, and Arts-in-Transit, as keys



At the Wagner Free Institute of Science

1700 W. Montgomery Ave., Philadelphia, PA 19121 215-763-6529 Tuesday-Friday 9am-4pm
<http://www.wagnerfreeinstitute.org>

Lectures and Other Events at the Wagner

Thursday, September 13, 2018 : Talk Series: Museums of the 21st Century featuring Nana Oforiatta Ayim and Vashti DuBois. Co-presented by Philadelphia Contemporary and the Wagner Free Institute of Science, 6 - 8 p.m.

Thursday, September 27, 2018 Weeknights at the Wagner with Dr. Jennifer Essler of the Penn Vet Working Dog Center, 6 - 7:30 p.m.

Saturday, October 6, 2018 Fall Harvest Festival, a science-filled family event, 12 - 4 p.m.

Wednesday, October 17, 2018 The Philadelphia Lantern Slide Salon, 6 - 8 p.m.

Thursday, November 1, 2018 : A cemetery-themed Weeknights at the Wagner with Aaron Wunsch from the University of Pennsylvania, 6 - 7:30 p.m.

Adult Education

Current Course Schedule - 2018 Fall

The Wagner Free Institute Fall 2018 Schedule has not yet been finalized as of publication date for *Phactum*. Please check at the Wagner website.

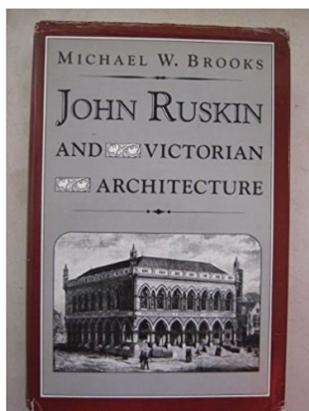
Classes are taught at introductory college undergraduate levels. All are welcome.

Ω Ω Ω

Wagner lectures and courses are FREE and open to the general public.

Contributions are gratefully received.

Courses are taught at introductory college level.



John Ruskin and Victorian Architecture By Professor Michael Brooks

Hardcover: 374 pages

Publisher: Rutgers University Press (April 1, 1987)

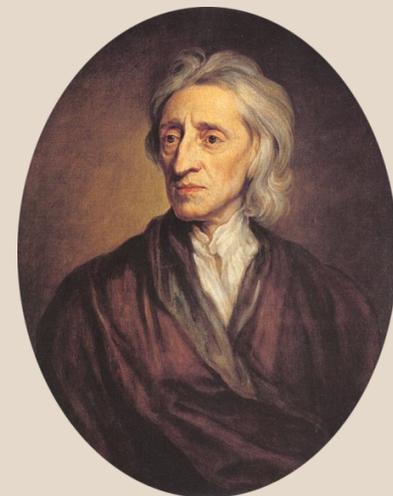
ISBN-10: 0813512050 ISBN-13: 978-0813512051

From the publication of *The Seven Lamps of Architecture* (1849) until nearly the end of the 19th century, John Ruskin was influential in determining the course of Victorian architecture.

This scholarly work examines the impact of "Ruskinism" on his contemporaries, and is especially attentive to the controversies that raged in the British journals and on the lecture circuits. Kristine O. Garrigan's *Ruskin on Architecture* (Univ. of Wisconsin Pr., 1973) and John Unrau's *Looking at Architecture with Ruskin* (Univ. of Toronto Pr., 1978) are excellent on the complexities of Ruskin's views, but this book is distinguished by its attention to the evolution of his thought throughout his career. Well written, documented, and illustrated, this work is highly recommended.

John Locke – His Philosophy of Human Nature

by Albert Fried-Cassorla



This brief essay will attempt to answer the question:
What was John Locke's philosophy of Human Nature?
Or, did he have one specifically?

Before considering an answer, we must consider, at least in a schematic way, what constitutes Human Nature? That is, what is our essence in our way of thinking or interacting with the world?

As a starting point, I hope my readers do not mind my referring to Wikipedia. Their definition is succinct if nothing else:

Human nature refers to the distinguishing characteristics—including ways of thinking, **feeling**, and **acting**—which **humans** tend to have **naturally**.¹

Of course, Locke was one of the great sources of inspiration for the American Revolution and on the thinking of Thomas Jefferson in particular. He was one of the great empiricists. And he wrote with clarity on how we acquire knowledge and even ideas through our sensory experiences. This was chiefly expressed in his *Essay on Human Understanding*.

In my opinion, Locke had a view of human nature in at least two regards:

He believed that humans were originally very peaceful in attitudes towards each other. This reasonable attitude towards other humans, in his view, is part of our human nature. Our human nature derives from Divine Law. Bertrand Russell says that Locke's ideas about this are not original and derive from St. Thomas Aquinas.²

He thought that our knowledge is naturally derived from our sensory experiences. This knowledge acquisition process is part of our human nature.

Certainly, Locke believed that people had a social contract obligation to the State. This was expressed in his *Essays on Government*.

He refers to a State of Nature. Man in a state of nature accepted a natural law and was generally pacific. Presumably, this means that cave men, living say 10,000 years ago or so, did not fight or have wars. In modern terms, we would say they "behaved."

As quoted by Bertrand Russell and again by me, Locke wrote:

"Men living together according to reason, without a common superior on earth, with authority to judge between them, is properly the state of nature."³

Continuing on, let us look briefly at Locke's views on how we acquire knowledge. He sets forth his thoughts most clearly on this in *An Essay Concerning Human Understanding*. Locke believes we have no innate ideas or principles. Thus, any knowledge of the world which we possess is not part of our innate human nature. Instead, we acquire our ideas.

Here is how he expressed this in a quote from that *Essay*:

It is an established opinion amongst some men, that there are in the understanding certain INNATE PRINCIPLES; some primary notions, KOIVAI EV-VOIAI,⁴ characters, as it were stamped upon the mind of man; which the soul receives in its very first being, and brings into the world with it. It would be sufficient to convince unprejudiced readers of the falseness of this supposition, if I should only show (as I hope I shall in the following parts of this Discourse) how men, barely by the use of their natural faculties may attain to all the

knowledge they have,
without the help of any innate impressions; and may
arrive at certainty,
without any such original notions or principles.⁵

623

4. A term meaning axiom, used by early Greek philosophers
5. John Locke, *An Essay Concerning Human Understanding*, Vol. 1, Project Gutenberg

This short essay cannot have completely delineated all of the subtleties of John Locke's views on human nature. Nonetheless, I hope I have elucidated at least some of his views on key aspects: man in his natural state, and man as he acquires knowledge.

Footnotes:

1. https://en.wikipedia.org/wiki/Human_nature
2. Bertrand Russell, *The History of Western Philosophy*, p. 623
3. Bertrand Russell, *The History of Western Philosophy*, p.

Albert Fried-Cassorla teaches English at Gwynedd Mercy University. He is also a founder of the Melrose Park Philosophy Club, a group of friends who have met to discuss ideas and to enjoy each others' company for about 20 years. He may be reached at amfriedcas@gmail.com or albfcc@icloud.com

Ω Ω Ω

More About: John Locke (1632-1704)

From *Phactum* Special Edition *The Physics of Free Will* (page 46)

By PhACT member Al Fonda, December 2010

<http://phact.org>

John Locke, —widely known as the Father of Liberalism, was an English philosopher and physician regarded as one of the most influential of Enlightenment thinkers. Considered one of the first of the British empiricists, following the tradition of Francis Bacon, ...Locke's theory of mind is often cited as the origin of modern conceptions of identity and the self, figuring prominently in the work of later philosophers such as Hume, Rousseau and Kant. Locke was the first to define the self through a continuity of consciousness. He postulated that the mind was a blank slate or tabula rasa. Contrary to pre-existing Cartesian philosophy, he maintained that we are born without innate ideas, and that knowledge is instead determined only by experience derived from sense perception.

Written shortly after Newton's *Principia* (1687), Locke's *An Essay Concerning Human Understanding* (1690) —sets out Locke's theory of ideas, including his distinction between passively acquired simple ideas, such as red, ' sweet, ' round, ' etc., and actively built complex ideas, such as numbers, causes and effects, abstract ideas, ideas of substances, identity, and diversity.

Now, experience is of two kinds. First, there is sensation by which yellow, white, heat, cold, soft, hard, bitter, we call sensible qualities. Second, the mind, although it has no innate ideas and is purely receptive in sensation, operates on the sensory ideas it receives. These operations we can perceive by introspection, and thus we are furnished with a second set of ideas, called ideas of reflection, such as perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds. Besides these two sources of ideas, sensation and reflections there is no other. ...

The formation of complex ideas out of all these simple ones depends on three activities of the mind: compounding, abstracting, and relating. ...We have many compound ideas of books, long shelves of them. But by abstracting their common qualities, and discarding their individual peculiarities, e.g., the circumstances of time and place, the exact size of each, and so on, we frame for ourselves the abstract idea of book. ...

The most important ideas of relation are doubtless the ideas of cause and effect. One cannot fail to notice that qualities and substances begin to exist and later pass away. ...By comparing the producer and the product the mind forms the ideas of cause and effect. See also William of Ockham.

Locke's idea of abstraction from sensory perception is carried to a rather different end by Father Robert Connor as he asks, "Is man truly capable of knowing something beyond what he sees with his eyes or hears with his ears? ...Cognitive realism ...agrees that ...nothing is in the intellect that was not first in the senses.' Nevertheless, the limits of these 'senses' are not exclusively sensory. ...Man not only knows colors, tones, and forms; he also knows objects globally... He knows, therefore, extrasensory truths."

Ω Ω Ω



Blue Bicycle

by Albert Fried-Cassorla

So much depends upon a blue bicycle
It must be a blue one, and not a red tricycle

Should we take it from that neighbor's stair?
And ride it on a dare?
You know, with you, I'd go anywhere

Then having too much sense
we'd return it to its residence
and drive by it in our car

and admire it from afar
in all its thrilling possibility
and quiet anonymity

March 10, 2018

Can You Know GOD Without Religion?"

by Paul Schlueter III

"**NATURAL LAW, THE** - Under Catholic doctrine, "the natural law" refers to the recognition/knowledge of God which can be obtained by pagans merely by observing nature and/or examining one's own conscience. May include the possession of such virtues as patience, courage, perseverance, charity, love, etc. Widely recognized among Jesuit missionaries in the early American colonization, many held that Natives already knew something of God, even before Christian indoctrination. The concept ignores the broader conclusion that morality and other positive traits may be developed without benefit of ANY religion; thus, Ockham's Razor may be used to demonstrate that no god(s) or religion(s) is/are actually necessary for an individual or a society to have mores that are generally perceived as "virtuous." (see "afflatus")

As laid out in the definition heading this page, there exists some recognition among one of the world's largest religions that the title question may be answered with a "yes." In this matter it is important to keep "the natural law" distinct from what many have come to view as Natural Law (the latter being those scientifically-recognized realities alternatively known as the Laws of Nature, such as evolution by environmental natural selection).

From the purely rational perspective, including the use of Ockham's Razor to avoid needless reliance upon (unprovable) deities or the supernatural, there is no need for any religion, OR for any god, in constructing a wholly naturalist worldview. A growing body of atheists the world over have learned that a good and sociable life can be led without god(s). Even death itself may be faced with full dignity and acceptance, if one is not caught up in the wishful thinking that their imagined "soul" must somehow survive the death of the body.

Some people prefer to retain some "spiritual" perspective. This is rather broadly defined, and it has the benefit of being a largely individual (or family) philosophy, including only favored aspects of practice, while avoiding any which might be felt to be obtrusive or otherwise undesirable. The dominant aspect of such a life tends to fall within the apparent sphere of "the natural law," particularly where a spiritual person has obtained his/her revelation(s) of spirit intuitively (from within), rather than from external indoctrination. Many people actually pass through a stage of "spirituality" as they progress from some childhood faith (generally imposed by family or community) toward atheism.

Spiritual people feel that knowledge of god can be revealed directly by god, without need for the interpretation of priests, religions, and social traditions. In this argument, if a god is omnipotent, there is no reason why that god would need intermediaries, particularly not human ones prone to misunderstandings. We can't even make a simple business agreement with some people, needing instead complex and lengthy contracts (written by expensive lawyers and enforced by capricious courts) to precisely spell out the expectations and duties of each party in every conceivable eventuality.

Why would any god, having intelligence superior to ours, rely upon prophetic revelation? Why would a god rely on the imprecise and evolving use of written language, to pass along the holy word in a book which will fade, rot, and eventually crumble to dust (requiring, therefor, imperfect copying of copies ad infinitum). When passing the gospel to humans who speak other languages, why would a god rely upon translations which are (at best) approximate and subject to cultural confusion?

In this last point, it is notable that adherents of Islam are encouraged to learn Arabic, the better to comprehend the revelations of the prophet Muhammed in their original language. However, prophets have a strong tendency to write/speak in metaphoric and allegorical terms, making their statements difficult to clearly understand, even among native speakers of the same language.

The Roman Catholic church did, for many centuries, use the Latin language (already "dead," and therefor presumed safe against natural linguistic evolution) for all literal readings and most prayers. There was a "mystery factor" in this practice, which gave some supplicants a sense of special privilege in receiving teaching from some source they could not understand without the help of the holy authorities. This also enabled those holy authorities to pretty much tell the congregants anything they wanted, since the common worshipper could not check the message of the sermon against the Latin biblical text to measure its conformity. The initial step made in breaking away from Roman Catholic dominion in Europe was the translation of the Bible into the local vernacular(s), so every literate family head could read it for himself (even if he lacked the Latin education limited primarily to the aristocracy and the priesthood). However, the translation was always of limited accuracy, since differ-

ent languages express the same idea in different ways. Even the "fixed" Latin had to be re-translated as vernaculars evolved.

This brings me to yet another curious point. According to the Bible, when men decided to build a tower to reach Heaven, old JHWH decided to punish those men by scattering them and making them speak different languages, so that they would be unable to come together in such a cooperative venture ever again (Genesis 11:1-9). If such a god made such a decision, wouldn't it be obvious that it would then be necessary for that god to directly give his holy word to each of those different language tribes? If you're deliberately making sure that people have trouble communicating, why then expect people to communicate accurately among themselves?

Linguists today describe similarities that show language evolution in ever-branching families, traceable to a sort of proto-language called Indo-European, yet that mother tongue would have been spoken long before the events alleged in the written testimony shared by Jews, Christians, and Muslims. Perhaps there was a "bottleneck" of language that took place when one major group left Africa to disperse throughout the rest of the world, but you'll never catch any of the major religions admitting to it. Few even admit that mankind evolved in Africa (I have to wonder if the African mother tongue was Indo-European?)

This brings us to a point where it becomes obvious that the god worshipped by "the big three" faiths today (in varying manner) actually worked against his own presumed purpose, that of ensuring that all men could come to believe in and worship Him. Even if you ascribe to the idea of a "chosen people" (presumably responsible for dissemination of the One True Faith), there is great difficulty in imagining a worse way to go about ensuring the accurate spread of the Holy Word. So much for omniscience and superior wisdom.

Lacking the benefit of a carefully-worded Pew Survey, I'm in no position to guess at the percentage of apostates who found the above to be sufficient reason to leave their faith. I think it's fair enough to assume that it was a supporting factor in quite a few instances.

Yet, we have the historical documentation of those Jesuit priests who served as missionaries in the New World*. Many Jesuits specifically sought evidence of what they already considered "the natural law," among the Native Americans they visited in both the northern and southern continents. Their particular missionary tradition caused them to have a relatively unique approach to the salvation of the pagan natives. First, they carefully moved in among their native subjects, and sought to make themselves useful (or at least, not burdensome) as a means of gaining acceptance for their presence. Next, they learned the native language and religion (as opposed to the more common "forced assimilation" method). The missionaries reported to their superiors as often as was practical, and among their records are many examples of what the Jesuits perceived as "good virtue," even though the natives clearly had no Christian heritage.

Try to imagine how different NA history would have been under a Muslim colonization, considering the state of various African cultures which have adopted Islam.

Native Americans (and without a doubt, aboriginal cultures all around the world) had uncounted generations in which to develop native beliefs, lifestyles, rules of conduct, and traditions. In almost all of those cultures (I know of only one exception, a remote Amazonian tribe), natives developed their own cultural concepts of deities (and other supernatural beings, though most believed such beings to be a "natural" part of their world).

If an observer is broad enough in his definition of what qualifies as a god, the count of gods grows quite high. Among the "animist" religions, not only is each animal ascribed its own spirit (and spiritual values), but so are the "inanimate" parts of creation, from the ancient "elements" (air, earth, fire, and water) to the stones, the stars, and just about anything humans could perceive. Both by observing "the roles played" by each such entity (consider, for example, a sentient and spiritual raincloud) in the overall environment, and by imagining more than a few relationships, each culture ascribed to each entity its own unique personality, spiritual function, and presumed history (yes, I mean creation and worldview myths).

We humans are invariably the ones drawing these relationship diagrams within our cultural picture. We see among ourselves a (seemingly inevitable) hierarchy of power, which is closely bound with authority (might making right, and all that). The immediate family has a leader/ruler, as does the extended family, as does the clan, as does the tribe, as does the supertribal group, etc. In times of conflict (and find a culture which hasn't known THOSE!), conquest and assimilation (in any of several degrees and forms) have caused the blending and/or extinction of religions (and gods!), cultures, and languages.

For better or for worse, some religions (and gods) have become dominant in our world, while uncounted numbers have

MCHUMOR.com by T. McCracken



"I fear Pig Latin is a dead language."

been lost. In this sense, an argument can be made that gods and religions follow a path as closely bound to evolutionary selection as that of any species of life (with the sad caveat that we who make the selections probably lack the wisdom to make wise choices). In many religions, one is first convinced to "accept on faith," and only later is taught how to twist reason in order to find "wisdom" in the irrational faith.

Through all of this, though especially within societies which are religiously tolerant and/or secular, there seems to be a pervasive need among apostates to hold onto something that feels "sacred." The more often such people are allowed to rely upon their own consciences (and whatever passes for "philosophical thought" in each person's mind), in the absence of authoritative religious teaching, the more such people are likely to come up with "a personal god" unique to that individual. Such personal gods are likely to have both similarities and distinctions (probably based on the conscious and subconscious effects of our cultural upbringing), but as long as there remains a linguistic concept of "god," there is most likely going to remain a substantial group of people who feel the personal sensation of "knowing" their own god. Yes, I believe that any one among us is probably capable of (and maybe prone to) conceiving "god," even without the guidance of any organized religion. I also believe that tolerance for this (apparently essential) aspect of natural human psychology should be as liberal as practical, but it should also be subject to cautious legal constraint (to prevent the inevitable efforts to force one person's/group's god upon others).

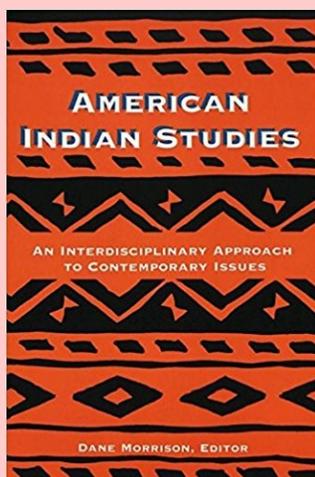
Atheism may be growing rapidly, but it will likely peak at some point far short of universal acceptance. Consider that the former U.S.S.R. attempted to outlaw religion and enforce atheism, yet once the Soviet regime collapsed, many Russian (and former satellite) citizens eagerly reverted to the faiths of their grandparents.

Organized religion grows and shrinks within the world's many cultures, often in some close relationship to that culture's power and wealth. It is unlikely that religion will "die out" as long as we exist in our current mental form, though it is apparent that religion will change (along with us) over time. The idea of one or more deity(-ies) will remain a trait of normal human psychology (sometimes with the help of organized religion, sometimes in its absence) unless and until some (probably several) neuro-genetic mutations in our brain structure somehow allow us to grow beyond the psychological inclination toward deism.

It has been said that, to every dog, his master is a god. If I were a god, then, I would have made people much more dog-like. Curiously, in Revelation 22:15, dogs are barred from the hereafter, along with murderers, idolaters, perverts, and sorcerers. I really couldn't make this stuff up!

Footnote: "For the essay which inspired and informed this one, see "American Indian Studies," edited by Dane Morrison, 1997, Peter Lang Publishing, Inc., ISBN 0- 8204-3101-X. In particular, see "The Catholic Missions to the Native Americans," by Ross Enochs, pp. 195 - 216, including 80 references.

Ω Ω Ω



American Indian Studies: An Interdisciplinary Approach to Contemporary Issues by **Dane A. Morrison**

Publisher: Peter Lang Inc., International Academic Publishers (July 1, 1997)

Hardcover: 430 pages

ISBN-10: 082043101X ISBN-13: 978-0820431017

This collection of essays brings to college students and the general public a scholarly, yet accessible and provocative text in Native American Studies. The contributors draw upon their expertise in such diverse disciplines as economics, education, film studies, history, linguistics, literature, museum studies, popular culture, and religion. Each essay highlights a particular aspect of Native American experience, from the oppressive indoctrination of boarding schools to the successful strategic planning of Indian casinos to the exciting creativity of Native American

literature. In addition, many of the essays introduce the reader to the disciplines through which we can approach this important and fascinating topic, engagingly taking the reader through the process of how historians or economists or literary scholars go about their work.

Another Anthropology Update

by Paul Schlueter III

The Spring of 2018 brings us to a new place in our understanding of ancestral prehistory. There seems to be new evidence that helps to clarify the time when *Homo sapiens* moved out of Africa, and into the rest of the world.

Science News ran a double issue for April 28 and May 12, 2018. On page 12 ran a review by Bruce Bower, of what a tiny finger bone has been able to tell science about the human diaspora through the Middle East. A single bone (thought to be the middle bone of the middle finger), discovered in 2016 at Al Wusta, Saudi Arabia, has been clearly identified by comparisons against the similar bones of other species. We know it to be human; we don't know its gender. Various dating (especially uranium decay dating) of the bone and a nearby hippo tooth sets the deposit at around 86,000 years ago. Al Wusta, at that time, is described as having been "well-watered and human-friendly."

This is the oldest known human fossil, outside of continental Africa. This moves the start of the diaspora from the usual citation (60 Kya), setting it 26,000 years earlier (give or take).

SN printed a rough timeline of human dispersal: By 194 Kya, humans were in what's now Israel. By 80 Kya, they were in East Asia, and by 60 Kya they were in Indonesia and Australia.

The Al Wusta site is quite productive in other ways, as well. SN cites 380 stone tools and 860 non-human animal fossils from the same geological period in this site alone.

This finger fossil (and the stone tools) brings into question the proposal that the human diaspora was limited to a single (or couple) event. Combined with "comparatively ancient sites" elsewhere on the Arabian peninsula, the current expert consensus is that humans left Africa in small groups, almost continuously, starting around 100 Kya. Periods of increased rainfall in the area may have opened travel windows for humanity, while periods (every 20,000 years or so) of relative dryness probably interrupted the exodus.

Experts have noticed subtle differences in the stone tools found at Al Wusta, compared to other sites from the period. Some explain that the Al Wusta travelers were culturally distinct from the more northern groups, and had travelled

there via the southern coastline of southwestern Arabia, having crossed a "narrow channel" from the African Horn. Other experts disagree, proposing that the Al Wusta group may have followed animals through a more northern route, before turning southward; after that, they might have altered their tool designs for environmental reasons. If more tools can be found in the region, dating to that ancient time period, perhaps more precise explanations can be made.

On the other hand, a slightly older pair of reports claims to have nailed down the exodus from Africa to "a single event between 50 and 80" Kya, based on DNA evidence. These stories come from Science News on 10/15/16, and the New York Times on 9/22/16. In the NYT article, Carl Zimmer claims that "[m]odern humans evolved in Africa roughly 200,000 years ago," and "[w]e know that there were multiple dispersals out of Africa, but we can trace our ancestry back to a single one."

The journal Nature had run a piece in which three genetics teams had made surveys of DNA from disparate modern world cultures, and concluded that all non-Africans today trace their her-



Fossil finger bone of *Homo sapiens* from the Al Wusta site, Saudi Arabia

itage to one single group. The three studies were by large groups of geneticists, using highly-detailed DNA reports from many hundreds of volunteers around the world, in urban and remote cultural groups. All around the globe, the human genomes came from a single root source. Only a small group of people from Papua New Guinea seem to carry a 2% trace of an older human group within their genomes. The elder group appears to have left Africa around 140 Kya, but since then they have otherwise vanished.

Another group, ancient Africans also described in the NYT article, appear to have separated from the broader genetic family around 200 Kya, stabilizing at around 100 Kya as the group we now identify as KhoiSan hunter gatherers, in modern Namibia. The KhoiSan apparently split off from other human groups, until becoming entirely isolated so many millennia ago. Their isolation lasted until relatively recent times.

The SN article on the genetic root of modern non-Africans cites the same group of studies in the 9/21/16 issue of Nature. SN cites evidence in a Neanderthal woman found in Siberia who had some human DNA, to prove that humans and Neanderthals interbred "as long as 110,000 years ago." However, the SN article agrees that such groups died out without contributing much to the overall human genome that survives today. According to SN's Tina Hesman Saey, there are dates ranging from 50 Kya to 75 Kya for "a massive wave of migrants who left Africa... who probably overwhelmed that small trickle" of other humans who had migrated earlier. After interbreeding with Neanderthals, this

huge group split into two, one going to populate Europe, and the other heading east into Asia.

Saey points out that genetic analyses can be misleading. They may confuse the timing of genetic history because of inaccurate mutation assumptions, skewed sampling, biased analysis, or other reasons. When viewed with archaeological evidence, geology, and the information of other sciences, the most likely exodus has a date of 80 to 100 Kya.

The hard evidence of dating physical remains offers slightly different dates than the softer evidence of genetic analysis, but when viewed together, it is almost certain that post-Africans moved through a relatively narrow time frame, and were probably a single cultural group of travelers coming out of Africa. That one large group, spurred by propitious events to leave in huge numbers, were so successful in moving across the Earth that they all but overwhelmed genetic evidence of any other human groups who left earlier. By their sheer number, they outperformed and outsurvived all competition, and became our forebears. Too bad none of our religious or historical writings record that truly exceptional point in history, let alone offering explanations for it.

Within the past 80,000 years or so, all post-African humans alive today, making up all the many blends of races and nationalities we now recognize, have evolved from one single, extended cultural family group. We are all cousins, in a very real and definitive sense. If only we could begin to act that way...

Ω Ω Ω



Early house hunting

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

PHACT CALENDAR

Upcoming 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 on the free parking garage on 17th street on the left hand side before Callowhill Street. It opens at 1:00 PM and closes at 6:00 PM. 17th Street is one way south bound. This meeting site is handicap accessible. **PhACT Meetings are Free and open to the public unless otherwise noted. Please try to arrive a few minutes early as the College now requires that meeting attendees sign in for security reasons. ID must be shown.**

Saturday, September 15, 2018 at 2:00 PM The PhACT 2018/2019 Lecture Season begins. **Rob Palmer** will be our speaker. His topic will be: “An Introduction to the Guerrilla Skepticism on Wikipedia (GSoW) Project”. See page 5.

Saturday, October 20, 2018 at 2:00 PM - PhACT Lecture.
Topic to Be Determined.

Saturday, November 17, 2018 at 2:00 PM- PhACT Lecture.
Our speaker will be **Linda Zimmerman**. Her topic will be her book: *Bad Science: A Brief History of Bizarre Misconceptions, Totally Wrong Conclusions, and Incredibly Stupid Theories*. See page 6.

Saturday, January 19, 2019 at 2:00 PM - PhACT Lecture.
Topic to Be Determined

Saturday, February 16, 2019 at at 2:00 PM - PhACT Lecture.
Topic to Be Determined

The Philadelphia Area Center for the History of Science (PACHS) maintains an extensive calendar of events about the history of science, technology and medicine that may contain some interesting events not listed in the *Phactum* Calendar. Check out their website at:

<http://www.pachs.net/events>

Lectures and Other Events of Interest for Skeptics Around Philadelphia

Friday, August 24 at 10am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

The Hot Spots and Storied Plots

In life and in death, we all have stories to tell and what better place to hear tales of wonder than Philadelphia's most famous home of the dead? This monthly tour series provides an informative overview of Laurel Hill's long and colorful history, which includes many of the marble masterpieces, stunning views and legendary stories that afford the cemetery its WOW factor. "The Hot Spots and Storied Plots" is the perfect introductory tour for anyone who enjoys beautiful art, scenic nature and fascinating history. Laurel Hill's experienced graveyard guides will offer visitors a unique perspective for every tour.

The cost is \$12/person; \$10/students and seniors; or \$9/members. Tickets can be purchased at the door or online.

Tour Guide: **Jessica Heichel**

Saturday, August 25 at 10am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

An Afternoon Out with Our Dearly Departed: Victorian Picnic

Before the existence of public parks and botanical gardens, there were few retreats from the crowded city for 19th-century Philadelphians. Boasting breathtaking art, stunning architecture and carefully curated horticulture, Victorians flocked to Laurel Hill with their picnics in tow for reflection, relaxation and recreation. Spend a morning enjoying the grounds, panoramic river views, and towering monuments just as the Victorians did 182 years ago on this guided walking tour and group picnic. Bring your own picnics, blankets and/or beach chairs. Victorian-themed attire is very much encouraged.

The cost is \$15/person; \$13/students and seniors and \$12/members.

Tour Guide: **Patricia Silverman**

Tuesday, August 28, 2018 at 7:00 pm to 10:00pm at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

SCIENCE AFTER HOURS

Don't Try This at Home

Get ready for the most explosive night of the year as we push science to the limit! Daring scientific demonstrations, the scale of which has never been seen at Science After Hours...this night is sure to knock your socks off!

This event is 21+.

Due to the popularity of this event, we strongly recommend that you purchase tickets in advance as capacity is limited and may sell out

Thursday, August 30 at 6pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, PA19132

<http://www.thelaurehillcemetery.org>

Famous Fights and Feuds

All may be peaceful in the cemetery now, but that wasn't always the case. Some of our permanent residents got themselves involved in epic disagreements which lasted years, and had far reaching impacts. Our "Famous Fights and Feuds" tour will tell you about broken engagements, affairs, insults, and murder, all of which stemmed from vendettas long since forgotten. Come enjoy one of the juicier, more salacious (but still educational) historical gossip sessions we offer as you tour the final resting places of those who held their grudges to the very end. Who was right? Who was wrong? That will be for you to decide as you listen to the tales of long-ago quarrels.

The cost is \$20/person; \$18/students and seniors and \$17/members. Tickets can be purchased at the door or online.

Tour Guide: **Alexis Pedrick**

Friday, August 31 at 10am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

The Hot Spots and Storied Plots

In life and in death, we all have stories to tell and what better place to hear tales of wonder than Philadelphia's most famous home of the dead? This monthly tour series provides an informative overview of Laurel Hill's long and colorful history, which includes many of the marble masterpieces, stunning views and legendary stories that afford the cemetery its WOW factor. The cost is \$12/person; \$10/students and seniors; or \$9/members. Tickets can be purchased at the door or online.

Tour Guide: **Steve Chawaga**

Saturday, September 1st, at 10 am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

Yoga in the Cemetery

Find inner tranquility and balance during a one-hour yoga session in the peaceful backdrop of Laurel Hill Cemetery, overlooking the Schuylkill River. Sessions will be led by experienced yoga

instructor, Emily Tara Sabalbaro. Emily teaches an all-levels slow flow class that enhances alignment, strength and balance. Students are encouraged to honor the energy that surrounds them as they form a deeper connection with their minds and bodies throughout the meditative practice. Emily has been practicing yoga since 2004 and teaching since 2011 at sites throughout the city. She currently teaches weekly at OpenBox Athletics, Mindful Elephant Yoga, and Philly Dance Fitness. To see her full teaching schedule, visit www.inspirejoy.com. Please bring your own mat and water. Sessions will be held outdoors on the pavement, along Millionaires' Row. All levels of experience are welcome.

Yoga in the Cemetery will be held on the first Saturday of every month at 10:00am, May through September (May 5, June 2, July 7, August 4 and September 1). Please convene at Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

Tuesday, September 4, 2018 - 6:00pm - 7:00pm at Eastern State Penitentiary, 2027 Fairmount Avenue, Philadelphia, PA 19130 phone: (215) 236-3300

<http://www.easternstate.org/home>

The Searchlight Series: Discussion Topic TBA.

Free. A reception follows the lecture.

Saturday, September 8th at 10:00 am at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

Hot Spots and Storied Plots

In life and in death, we all have stories to tell and what better place to hear tales of wonder than Philadelphia's most famous home of the dead? Join Laurel Hill Cemetery for an informative overview of Laurel Hill's long and colorful history, which will include many of the marble masterpieces, stunning views and legendary stories that afford the cemetery its WOW factor.

The cost is \$12/person; \$10/students and seniors; or \$9/members.

Saturday, September 8, 12-5pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

Gone But Not Forgotten: Market of the Macabre

Peruse a curated collection of unusual antiques, assorted oddities, vintage items, artwork and handmade wares at this outdoor market of the macabre. Taking place in the most fitting of venues - a 182-year-old Victorian cemetery - visitor's will have the opportunity to explore their morbid



curiosity, in addition to Laurel Hill's scenic grounds and rich history. The afternoon will in-



clude food and beer for purchase from local vendors—don't forget to bring cash! Victorian and/or Steampunk attire is encouraged.

The event will take place on Saturday, September 8 from 12-5pm (with a pre-scheduled rain date of Sunday, September 9 from 12-5pm) at Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Parking is limited so please plan to arrive via ride-share, public transportation or bicycle. The entrance fee is \$5 per person. Only cash will be accepted at the door.

Curated and organized by the Friends of Laurel Hill Cemetery, a selection of unique vendors will be chosen for the 2018 "Market of the Macabre." Submitting an application does not guarantee acceptance. Vendors may apply starting April 13 through May 4. Selected vendors will be notified no later than May 11. Vendor registration is now closed.

Saturday, September 8., 2018 at 1:00 p.m.–3:00 p.m. at Science History Institute, 315 Chestnut Street, Philadelphia

[Www.Sciencehistory.org](http://www.sciencehistory.org)

WikiSalon

A casual gathering of Wikipedia enthusiasts and those interested in learning more. Participants can edit articles of their own choice and suggest articles needing improvement to the group.

Free and Open to the Public.

Novices are encouraged to attend.

Sunday, September 9th at 1:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurelhillemetery.org>

Sinners, Scandals, and 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 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.

The cost is \$15/person; \$13/students and seniors; or \$12/members. Reservations are suggested. Tour Guide: **Tom Keels**

Monday, September 10, 2018 at 6:00 PM at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

Science on Tap

A monthly gathering that features a brief, informal presentation by a scientist or other expert followed by lively conversation. Good food and beer.

Must be 21 or accompanied by parent. Free and open to the Public.

<http://scienceontapphill.com/>

Tuesday, Sept. 11, 2018 at 6:00 PM at World Cafe Live, 3025 Walnut Street, Philadelphia

<http://www.upenn.edu/pennnews/science>

PENN LIGHTBULB CAFE

See website for lecture details.

Free and Open to the General Public.

Tuesday, September 11, 2018 -7:00 pm to 10:00pm at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

NIGHT SKIES AT THE JOEL M. BLOOM OBSERVATORY

Join us for an evening of 'out of this world' astronomy activities hosted by Franklin Institute Chief Astronomer Derrick Pitts. 'Night Skies at the Observatory' is a monthly stargazing event connecting you to celestial objects in the night sky including stars, planets, and nebulae using

telescopes in Bloom Observatory and at 'Ben's Starlight Lounge' on our 5th floor rooftop observation deck, featuring a cash bar. Build your own experience from any combination of planetarium shows, a live science talk on astronomy or space science, hands-on astronomy activities and continuous telescopic observing all evening (weather permitting). The program is staffed with knowledgeable observers and free star maps are provided.

See website to purchase tickets.

Thursday, September 13, 2018 at 6:00 PM at the Wagner Free Institute of Science, 1700 West Montgomery Avenue, Philadelphia, PA 19121

www.wagnerfreeinstitute.org

Talk Series: Museums of the 21st Century featuring Nana Oforiatta Ayim and Vashti DuBois. Co-presented by Philadelphia Contemporary and the Wagner Free Institute of Science, 6 - 8 p.m. Free and Open to the Public

Thursday, September 13, 2018 at 7:00 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103

<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

The Center Cannot Hold: Addressing the Stigma of Serious Mental Illness through Opera

Enjoy a live performance and important discussion addressing the stigma of mental illness through music. Psychiatrist and composer Kenneth Wells will demonstrate and discuss his opera based on the award-winning memoir, *The Center Cannot Hold: My Journey Through Madness*, by Elyn Saks. Singers will perform vocal selections with piano accompaniment.

Program promptly begins at 7pm. Join us for light refreshments after the lecture.

Friday, Sept. 14th & Saturday, Sept. 15th at 8pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurelhillemetery.org>

Death is a Cabaret, Ol' Chum: A Graveyard Cabaret (Presented by REV Theater Company)

at Eastern State Penitentiary, 2027 Fairmount Avenue Philadelphia, PA 19130

Phone: (215) 236-3300

The Searchlight Series: Conversations About Crime, Justice, and the American Prison System

Eastern State Penitentiary Historic Site partners with nationally recognized penologists and educators to present an ongoing discussion series about crime, justice, and the American prison system. The Searchlight Series discussions take place the first Tuesday of every month, free and open to the public. No reservations required. See website at:

<http://www.easternstate.org/searchlight-series>



Back from the dead by popular demand, New York-based REV Theatre Company will return to Laurel Hill Cemetery to both thrill and chill audiences amid the tombs. Conceived and created by REV's Co-Artistic Director, Rudy Caporaso, directed by Co-Artistic Director, Rosey Hay and musically directed by Rob Borchert; this original cabaret will be presented as part of the 2018 Philly Fringe Festival. Sip on free cocktails while you wait for three (singing) souls to appear through the mists of Laurel Hill for a toe-tapping, spine-tingling good time. Bring your own blankets or beach chairs.

Two weekends of performances are scheduled to take place on September 14, 15, 21 and 22 (with prescheduled rain dates on September 16 and 23) All performances begin at 8:00pm, and will kick off with cocktails in the courtyard at 7:30pm. Ticketholders can check in at Laurel Hill Cemetery's Gatehouse entrance, 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot directly across the street from the Gatehouse.

The cost for the program is \$30/person general admission. Advance reservations are requested.

**Saturday, September 15, 2018
2:00 PM.**

PhACT Lecture. Rob Palmer will present a topic will be: "An Introduction to the Guerrilla Skepticism on Wikipedia (GSoW) Project".

See page 5

**Sunday, September 16th, at 1:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, <http://www.thelaurehillcemetery.org>
Blue Signs of History: PA Historical Marker Connections**

If you drive down any large road—and even many small roads—in Pennsylvania you will inevitably encounter a Pennsylvania historical marker.

There are more than 2,000 "blue signs of history" that tell the stories of individuals and events that left their mark on the state, as well as the nation and world. Many people who earned "blue sign" status now rest at Laurel Hill Cemetery and during this tour we'll learn some of their stories. These include the general who led the Union Army to victory at Gettysburg; a renowned adventurer whose explorations took him deep into the Arctic; and the industrialist whose very early photographic self-portrait has earned the designation of being the first "selfie."

The cost is \$15/person; \$13/students and seniors and \$12/members.

Tour Guides: **Rich Wilhelm and Russ Dodge**

Sunday, September 16, 2018 at 12:30 PM at the American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia <http://www.amphilosoc.org>

Climate Justice with Mary Robinson

Former President of Ireland and U.N. Special Envoy on Climate Change Mary Robinson (APS 1999) will speak on her new book *Climate Justice: Hope, Resilience, and the Fight for a Sustainable Future*.

Holding her first grandchild in her arms in 2003, Mary Robinson was struck by the uncertainty of the world he had been born into. Before his fiftieth birthday, he would share the planet with more than nine billion people—people battling for food, water, and shelter in an increasingly volatile climate. The faceless, shadowy menace of climate change had become, in an instant, deeply personal. Mary Robinson's mission would lead her all over the world, from Malawi to Mongolia, and to a heartening revelation: that an irrepressible driving force in the battle for climate justice could be found at the grassroots level, mainly among women, many of them mothers and grandmothers like herself. From Sharon Hanshaw, the Mississippi matriarch whose campaign began in her East Biloixi hair salon and culminated in her speaking at the United Nations, to Constance Okollet, a small farmer who transformed the fortunes of her ailing community in rural Uganda, Robinson met with ordinary people whose resilience and ingenuity had already unlocked extraordinary change.

Powerful and deeply humane, *Climate Justice* is a stirring manifesto on one of the most pressing humanitarian issues of our time, and a lucid, affirmative, and well-argued case for hope.

Free and open to the public. See website to register.

Sunday, September 16, 2018 at 1:00 pm - 4:00 pm at Commonwealth Chateau, Chestnut Hill College, 9230 Germantown Avenue, Philadelphia, PA 19118

The Institute for Science and Religion

<http://www.irands.org>

Drawn to Follow the Road of Fire: Teilhard and Struggle –

Sister Kathleen Duffy, SSJ, PhD

Soon after completing his service in World War I, Teilhard became aware that he was being drawn like the patriarchs of old to follow the road of fire. He had no idea at the time just how intense his future struggles would be or how profound the suffering that his commitment would require. However, he did understand that, as a participant in an evolutionary world, he should expect and embrace struggle as the price to be paid for progress. His evolutionary spirituality sustained him and also animated his hope in the future of our world despite the difficulties that beset humanity in every age. In this lecture, we walk with Teilhard along his road of fire to learn how to deal with the struggles of our day.

Kathleen Duffy, SSJ is Professor of Physics at Chestnut Hill College, where she directs the Interdisciplinary Honors Program and the Institute for Religion and Science. She is editor of *Teilhard Studies* and serves on the Advisory Boards of the American Teilhard Association and *Cosmos and Creation*. Her present research deals with the way Teilhard de Chardin's religious writings connect with modern science. She has published several

book chapters and articles on these topics, an edited volume of essays entitled *Rediscovering Teilhard's Fire* (St. Joseph's University Press, 2010), and *Teilhard's Mysticism: Seeing the Inner Face of Evolution* (Orbis Books, 2014).

Come join us at 1pm on September 16th! Free Will Donations are accepted and very much appreciated. Light refreshments will be offered.

Sunday, September 16, 2018 at 2:30 PM at 1600 Woodland Rd | Abington, PA 19001

Penn State University – Abington

<http://abington.psu.edu/cultural-community-events>

Opera Lecture - Lucia di Lammermoor

Moderator: Dr. Moylan C. Mills, professor emeritus of integrative arts

Gaetano Donizetti's bel canto (beautiful singing) masterpiece focuses on a naive young girl who is rejected by the man she adores and, thus, descends into madness. The music is brilliant and Lucia's break-down scene is one of the greatest moments in the history of operatic art. Light refreshments served.

Admission: \$15 (Free for Penn State students, faculty, and staff. Must show ID.)

2:30 p.m., 112 Woodland Building

Tuesday, September 18, 2018 at 7:15 PM at the Fels Planetarium, The Franklin Institute, 222 North 20th Street, Philadelphia, PA 19103

The Rittenhouse Astronomical Society

Astronomy lecture open to the General Public. See website for more details:

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

Friday, Sept. 21 & Saturday, Sept. 22 at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, <http://www.thelaurehillcemetery.org>

Death is a Cabaret, O' Chum: A Graveyard Cabaret (Presented by REV Theater Company)

Back from the dead by popular demand, New York-based REV Theatre Company will return to Laurel Hill Cemetery to both thrill and chill audiences amid the tombs. Conceived and created by REV's Co-Artistic Director, Rudy Caporaso, directed by Co-Artistic Director, Rosey Hay and musically directed by Rob Borchert; this original cabaret will be presented as part of the 2018 Philly Fringe Festival. Sip on free cocktails while you wait for three (singing) souls to appear through the mists of Laurel Hill for a toe-tapping, spine-tingling good time. Bring your own blankets or beach chairs.

Two weekends of performances are scheduled to take place on September 14, 15, 21 and 22 (with prescheduled rain dates on September 16 and 23) All performances begin at 8:00pm, and will kick off with cocktails in the courtyard at 7:30pm. Ticketholders can check in at Laurel Hill Cemetery's Gatehouse entrance, 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot directly across the street from the Gatehouse.

The cost for the program is \$30/person general admission. Advance reservations are requested.

Thursday, September 20, 2018 at 5:30 PM at the American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia
<http://www.amphilosoc.org/>

Frontier Rebels with Patrick Spero

Librarian Patrick Spero's new book *Frontier Rebels: The Fight for Independence in the American West 1765–1776* is the untold story of the “Black Boys,” a rebellion on the American frontier in 1765 that sparked the American Revolution. Drawing on largely forgotten manuscript sources from archives across North America, Patrick Spero recasts the familiar narrative of the American Revolution, moving the action from the Eastern Seaboard to the treacherous western frontier. In spellbinding detail, *Frontier Rebels* reveals an often-overlooked truth: the West played a crucial role in igniting the flame of American independence.

Free and open to the public. See website to register.

Sunday, September 23rd, at 1:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurelhillemetery.org>

An Arborist's Angle: Laurel Hill's Specimen Trees

Laurel Hill cemetery is more than a burial ground – it is a historic landscape and public garden that has provided Philadelphia's an unmatched horticultural retreat from the city for the last 182 years. John Jay Smith, the founder of Laurel Hill, was an avid horticulturalist and designed the cemetery to feature rolling lawns and specimen trees and shrubs. The legacy of Smith's vision can be seen today in trees that likely date back to the original plantings, as well as new plantings designed to emulate the original historic landscape design.

An Arborist's Angle, a walking tour through Laurel Hill Cemetery, will highlight some of the most impressive and interesting trees of the cemetery. Join Aaron Greenberg, Laurel Hill's Arborist, in a discussion of some of his favorite specimens. Special attention will be given to trees with historical significance to Laurel Hill and Philadelphia horticulture, as well as trees exhibiting excellent fall color! Aaron is a Certified Arborist by the International Society of Arboriculture, and will be available to answer questions about any of the beautiful trees of Laurel Hill Cemetery.

The tour will take place on Sunday, September 23 at 1:00pm, departing from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$15/person; \$13/students and seniors; or \$12/members. Reservations are suggested.

Sunday, September 23, 2018 a 2:00PM - 3:00PM at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

THE DIGITAL RESTORATION INITIATIVE: READING THE INVISIBLE LIBRARY

Damaged artifacts that containing text (like scrolls) make up an “invisible library” of written

material that is incredibly difficult to read. Progress over the past decade using new computer techniques for the digitization and analysis of text found in cultural objects like inscriptions, manuscripts, and scrolls, has led to workable, non-invasive methods for reading this invisible library. Dr. W. Brent Seales, Professor and Chairman, Computer Science, University of Kentucky, shares results collected over the past two decades from digital restoration projects on Homeric manuscripts, charred Herculaneum scrolls buried by Vesuvius, and Dead Sea scrolls, culminating in the reading of the text from within a damaged scroll unearthed at Ein-Gedi—hailed as one of the most significant biblical archaeology discoveries of the past decade. This lecture is presented by the Archaeological Institute of America, Philadelphia Society.

Free and open to the public.

Monday, September 24, 2018 at 7:00 PM at Scoogi's Italian Kitchen & Bar
 738 Bethlehem Pike Flourtown, PA 19031

American Revolution Round Table of Philadelphia,

<http://arrtop.org/>

See website for program details.

Free and Open to the Public.

Tuesday, Sept. 25, 2018 at 6:00 PM at World Cafe Live, 3025 Walnut Street, Philadelphia

<http://www.upenn.edu/pennnews/science>

PENN Science CAFE

See website for lecture details.

Free and Open to the General Public

Tuesday, September 25, 2018 at 7:00 pm to 10:00pm at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

SCIENCE AFTER HOURS

Speakeasy

Enter the pixelated landscapes that once inhabited the cabinets of your local arcade. Explore the worlds of your favorite video games and discover how current games are bridging the gap between science and education. This event is 21+.

Due to the popularity of this event, we strongly recommend that you purchase tickets in advance as capacity is limited and may sell out.

Wednesday, September 26, 2018 at 5:30 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103

<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

Philadelphia Public Health Grand Rounds: Alcohol, Violence, and Public Health in Philadelphia

Topic: Alcohol, Violence, and Public Health in Philadelphia

Excessive alcohol use causes substantial negative health impacts. In addition, alcohol sales may also adversely affect public health and community wellbeing. This session will explore the inter-

**Calling All Astronomers!
 Rittenhouse Astronomical
 Society**

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



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

www.rittenhouseastronomicalsociety.org/

twined nature of alcohol use and violence. The location and characteristics of alcohol outlets can have significant impact on neighborhood violence rates, and there are close links between alcohol use, firearm homicide, and suicide. Healthcare providers and public health professionals may have opportunities to reduce violence in a community through interventions that target alcohol.

Thursday, September 27, 2018 at 12:30PM - 1:30PM at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

MEMORY AT “THE MINE OF DEATH”: CULTURAL LANDSCAPES OF ANDEAN MERCURY MINING

Dr. Douglas K. Smit, Adjunct Assistant Professor of Anthropology, University of Pennsylvania, considers the divergent historical narratives at the Huancavelica mercury mining complex in the Peruvian Andes, at this Penn Cultural Heritage Center-sponsored lunchtime talk. For Spanish colonial administrators, Huancavelica was the “crown jewel” of the empire due to lucrative mercury mining and technological advances in metallurgy. For indigenous Andean peoples forced to labor underground, the danger of mercury poisoning became so extreme that Huancavelica became known as “the mine of death.” Drawing from archaeological fieldwork and oral histories collected since 2013, Dr. Smit explores how the people of Santa Bárbara negotiate the development of cultural heritage in their community in concert with and sometimes counter to the narratives of government officials, outside consultants, and North

American archaeologists. Brown bag lunches are welcome at this free event.

Free and open to the public.

Thursday, September 27, 2018 at 6:00 PM at the **Wagner Free Institute of Science**, 1700 West Montgomery Avenue, Philadelphia, PA 19121
www.wagnerfreeinstitute.org

Weeknights at the Wagner with Dr. Jennifer Essler of the Penn Vet Working Dog Center, 6 - 7:30 p.m.

Free and Open to the Public

Thursday, September 27, 2018 at 6:30 PM at **College of Physicians of Philadelphia**, 19 South Twenty-Second Street, Philadelphia, PA 19103
<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

"Bad Advice" Book Talk & Signing with Author Dr. Paul Offit

Science doesn't speak for itself. Neck-deep in work that can be messy and confounding, and naive in the ways of public communication, scientists are often unable to package their insights into the neat narratives that the public requires. Enter the celebrities, the advocates, the lobbyists, and the funders behind them, who take advantage of scientists' reluctance to provide easy answers, flooding the media with misleading or incorrect claims about health risks. Amid this onslaught of spurious information, Americans are more confused than ever about what's good for them and what isn't.

In *Bad Advice*, Paul A. Offit shares hard-earned wisdom on the do's and don'ts of battling misinformation. For the past twenty years, Offit has been on the front lines in the fight for sound science and public health. Stepping into the media spotlight as few scientists have done—such as being one of the first to speak out against conspiracy theories linking vaccines to autism—he found himself in the crosshairs of powerful groups intent on promoting pseudoscience. Offit discusses science and its adversaries: not just the manias stoked by slick charlatans and their miracle cures but also corrosive, dangerous ideologies such as Holocaust and climate-change denial. Written with wit and passion, Offit's often humorous guide to taking on quack experts and self-appointed activists is a must-read for any American disturbed by the recent uptick in politicized attacks on science.

Program promptly begins at 6:30pm. Join us for light refreshments after the lecture.

The Mütter Museum will not be open during this event.

Thursday, September 27-29, 2018 at 5:00 PM at the **American Philosophical Society**, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia
<http://www.amphilsoc.org/>

The Past, Present, and Future of Libraries

In commemoration of the American Philosophical Society's 275th anniversary, the Society's Library, along with the Gladys Kriebel Delmas Foundation and the Association of Research Libraries (ARL), is hosting an interdisciplinary conference that explores the history of libraries, the present oppor-

tunities for libraries, and the potential future for libraries as they continue to evolve in the 21st century.

The conference will begin with a keynote discussion focused on the future of libraries on Thursday, September 27, hosted by Sarah Thomas (Vice President for the Harvard Library and University Librarian and Roy E. Larsen Librarian for the Faculty of Arts and Sciences) and including Mary Lee Kennedy (Executive Director, Association of Research Libraries), Khalil Gibran Muhammad (Professor of History, Race, and Public Policy at Harvard Kennedy School and Suzanne Young Murray Professor, Radcliffe Institute for Advanced Studies), and Dr. Michael Witmore (Folger Shakespeare Library).

Free and open to the public. See website to register.

Friday, September 28th at 10am at **Laurel Hill Cemetery**, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurelhillemetery.org>

Hot Spots and Storied Plots

In life and in death, we all have stories to tell and what better place to hear tales of wonder than Philadelphia's most famous home of the dead? Join Laurel Hill Cemetery for an informative overview of Laurel Hill's long and colorful history, which will include many of the marble masterpieces, stunning views and legendary stories that afford the cemetery its WOW factor.

The cost is \$12/person; \$10/students and seniors; or \$9/members.

Friday, September 28th at 8pm at **Laurel Hill Cemetery**, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurelhillemetery.org>

Cinema in the Cemetery (Presented with the Not So Silent Cinema)

Pack a picnic, gather some friends or a date, and enjoy an evening under the stars. As the sun sets over Laurel Hill's historic tombs, the grainy joys of the film experience will be brought to life during the cemetery's annual summertime movie series. September's feature film, *Nosferatu* directed by F.W. Murnau, will be presented in conjunction with The Not So Silent Cinema.

Come experience this silent, 1922 masterpiece the way it was always meant to be viewed: with live musical accompaniment. An original score by Brendan Cooney will be performed live by an avant-Klezmer Quartet:

Carlos Santiago- violin
Larry Goldfinger- clarinet
Brendan Cooney- piano
Chris Coyle- bass

This September, for your listening pleasure as you travel into the ethereal Transylvanian mountains, you can experience the full horror of the film with a live quartet of avant-Klezmorim as they blend a haunting tapestry of Klezmer motifs, Gypsy grooves, avant-garde textures, and classic horror effects. Come see for yourself how the music creates an eerie backdrop to the story of the mysterious Count Orlock (Max Schreck), and the hapless visitors in his Transylvania estate.

NIGHT SKIES IN THE JOEL N. BLOOM OBSERVATORY — at the Franklin Institute

The second Thursday of each month at 7:00 to 10:00 PM ... see website



Bring your own blankets or beach chairs and/or picnics.

The screening will take place on Friday, September 28 at 8:00pm (with a prescheduled rain date of Saturday, September 29 at 8:00pm). The cemetery gates open at 7:00pm. Ticket holders can check in at Laurel Hill Cemetery's Gatehouse entrance, 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot directly across the street from the Gatehouse.

The cost is \$12/person general admission. Purchasing advance tickets is suggested.

Sunday, September 30th at 1:00 pm at **Laurel Hill Cemetery**, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurelhillemetery.org>

Pints and Plots: Laurel Hill's Buried Brewers

This autumnal walking tour will focus on the history of beer in Philadelphia, and the permanent residents of Laurel Hill who produced, distributed and enjoyed it. Led by award-winning homebrewer and certified beer judge, Mike Lewandowski, the tour will conclude with a toast and a sampling of local beers.

The program will take place on Sunday, September 30th at 1:00pm, departing from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$20/person general admission. Space is limited and advanced reservations are suggested.

Tuesday, October 2, 2018 - 6:00pm - 7:00pm at Eastern State Penitentiary, 2027 Fairmount Avenue, Philadelphia, PA 19130 phone: (215) 236-3300
<http://www.easternstate.org/home>

The Searchlight Series: Discussion Topic TBA
Free. A reception follows the lecture.

Thursday, October 4, 2018 at 5:30 PM at the **American Philosophical Society**, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia
<http://www.amphilsoc.org/>

An Academic Life with Hanna Gray

In honor of the American Philosophical Society's 275th anniversary, the Society's 2018 lecture series will feature talks inspired by the APS's history and the work of its Members. Hanna Holborn Gray was elected to the Society in 1981.

Hanna Holborn Gray has lived her entire life in the world of higher education. The daughter of academics, she fled Hitler's Germany with her parents in the 1930s, emigrating to New Haven, where her father was a professor at Yale University. She has studied and taught at some of the world's most prestigious universities. She was the first woman to serve as provost of Yale. In 1978, she became the first woman president of a major

research university when she was appointed to lead the University of Chicago, a position she held for fifteen years. In 1991, Gray was awarded the Presidential Medal of Freedom, the nation's highest civilian honor, in recognition of her extraordinary contributions to education.

An Academic Life is a candid self-portrait by one of academia's most respected trailblazers. Gray describes what it was like to grow up as a child of refugee parents, and reflects on the changing status of women in the academic world. She discusses the migration of intellectuals from Nazi-held Europe and the transformative role these exiles played in American higher education—and how the émigré experience in America transformed their own lives and work. She sheds light on the character of university communities, how they are structured and administered, and the balance they seek between tradition and innovation, teaching and research, and undergraduate and professional learning.

An Academic Life speaks to the fundamental issues of purpose, academic freedom, and governance that arise time and again in higher education, and that pose sharp challenges to the independence and scholarly integrity of each new generation.

Hanna Holborn Gray is the Harry Pratt Judson Distinguished Service Professor Emeritus of Early Modern European History at the University of Chicago, where she served as president from 1978 to 1993. She is the author of *Searching for Utopia: Universities and Their Histories*. She lives in Chicago.

Free and open to the public. See website to register.

Saturday, October 6, 2018 at noon at the Wagner Free Institute of Science, 1700 West Montgomery Avenue, Philadelphia, PA 19121
www.wagnerfreeinstitute.org

Fall Harvest Festival, a science-filled family event, 12 - 4 p.m.

Free and Open to the Public

Saturday, October 6 at 5pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurehillcemetery.org>
10th Annual Rest in Peace 5K Run

Trick or treat...move

your feet! Kick off your Halloween season the right way. Organized by the Friends of Laurel Hill Cemetery, the Rest in Peace 5K Run is the premier Halloween costume run and after-party in the region!

Unique and challenging, the run winds through the headstones in Laurel Hill Cemetery. Participants and spectators alike are encouraged to attend in Halloween attire. Directly following the run, prizes are awarded for the best costume as well as to the winners of the run at an after-party that features free beer from Magic Hat, classic rock music by 102.9 WMGK and a chance to win top-notch prizes.

Proceeds benefit the Friends of Laurel Hill



Cemetery, a nonprofit dedicated to the preservation of Laurel Hill Cemetery, a National Historic Landmark. In addition to being a good time, the run is also a very community minded event, connecting runners, local businesses and organizations together through fellowship, fitness and fun! For those looking for a charity fitness event that is cool albeit creepy, the RIP 5K is the perfect choice!

The RIP 5K Run will take place on Saturday, October 6 at 5:00pm (registration opens at 4:00pm), and is a rain or shine event. Runners and spectators should enter via Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

Registration opens on June 1, 2018.

Monday, October 8, 2018 at 6:00 PM at National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

Science on Tap

A monthly gathering that features a brief, informal presentation by a scientist or other expert followed by lively conversation. Good food and beer. Must be 21 or accompanied by parent. Free and open to the Public.

<http://scienceontapphilly.com/>

Tuesday, October 9th at 6:00 pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

Spirits and Spiritualists

In the 19th century, thousands of Philadelphians believed that they could communicate with the dead. All it took was a darkened room, a circle of believers, and a sensitive medium. Other Philadelphians mocked the table-rappers and tried to expose their tricks. Both believers and skeptics are well represented in historic Laurel Hill Cemetery. Along this tour, we will stop at the resting place of Catherine Drinkhouse Smith, whose monument proclaims her as "one of the best mediums of our time," and at the grave of Adam Seybert, whose last will and testament allocated a large sum to the University of Pennsylvania for a study of the truths of spiritualism. We will also visit the grave of Horace H. Furness, the Shakespeare scholar who led an official inquiry into the claims of spiritualists, and at the hillside tomb of Elisha Kent Kane, the famed arctic explorer who scoffed at spiritualism but who fell in love with America's most beautiful young medium.

This twilight tour and reception will take place on Tuesday, October 9 at 6:00pm, departing from Laurel Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse.

The cost is \$20/person; \$18/students and seniors; or \$17/members. Reservations are suggested.

Tour Guide: **Michael Brooks**

Tuesday, October 9, 2018 at 6:00 PM at World Cafe Live, 3025 Walnut Street, Philadelphia

<http://www.upenn.edu/pennnews/science>

PENN LIGHTBULB CAFE

See website for lecture details.

Free and Open to the General Public.

Tuesday, October 9, 2018 at 5:30 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103

<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

Archives Month Philly Event: From Ointments & Salves to Kotex & Pills

Registration opens September 10th at 9:00AM. Limited tickets available.

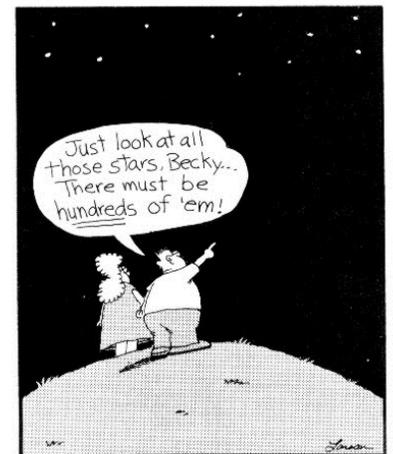
As part of Archives Month Philly, the Historical Medical Library of The College of Physicians of Philadelphia will be hosting an open house and a special pop-up exhibit, "From Ointments & Salves to Kotex & Pills." "From Ointments & Salves to Kotex & Pills" looks at how women's healthcare has changed in the West, from 17th century recipe books to mid-20th century manuals and ephemera.

This event is open house-style: you can stop by anytime between 5:30pm-7:00pm.

Tuesday, October 9, 2018 -7:00 pm to 10:00pm at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

NIGHT SKIES AT THE JOEL M. BLOOM OBSERVATORY



Carl Sagan as a kid

Join us for an evening of 'out of this world' astronomy activities hosted by Franklin Institute Chief Astronomer Derrick Pitts. See website to purchase tickets.

Tuesday, October 11, 2018 at 6:30 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103

<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

Shopping for Health: Medicine and Markets in America

Why do we refer to patients as "consumers" in the United States?

Is today's opioid crisis the result of medical consumerism run amok—of pills hawked like

soap to gullible shoppers? Is picking a doctor really like choosing a new car? Join us to discuss when and why patients started to be called "consumers," and to examine the positive and negative aspects of 20th c. medical "consumerism." We will explore a century of efforts to deliver pharmaceutical relief through properly calibrated markets, and evaluate the risks (and often-misunderstood benefits) of governing addictive drugs as consumer goods.

Friday, October 12 at 7pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia, <http://www.thelaurelhillemetery.org>

True Tales From the Tombs

On a mid-October evening, performers will regale you with true tales from Laurel Hill Cemetery's historic tombs. Complete with scandal, mystery and murder, True Tales from the Tombs will feature stories of the Cemetery's most provocative and memorable permanent residents, as they return from the dead to tell their stories. Featuring The Not Ready for After-Life Players as storytellers of these tormented tales, the candlelit tours will depart every half-hour through the stones and mausoleums of Laurel Hill. Afterward, slow your heart rate with seasonal refreshments and cocktails aside blazing fire pits.

One evening of True Tales from the Tombs is scheduled at Laurel Hill: Friday, October 12 at 7:00 pm (with a pre-scheduled rain date of Saturday, October 13 at 7:00 pm). Tours will last approximately one hour and depart every half-hour, with the final tour departing at 9:00pm. Attendees are advised to wear comfortable clothes and shoes, and to bring a flashlight.

The cost is \$25/person general admission. Advance reservations are strongly suggested. Tickets can be purchased at the door or online. Upon arrival, register at Laurel Hill Cemetery's Gatehouse entrance, 3822 Ridge Avenue, Philadelphia, PA, 19132. Free parking is located in the lot directly across the street from the Gatehouse.

Saturday, October 13, 2018 at 1:00 p.m.–3:00 p.m. at Science History Institute, 315 Chestnut Street, Philadelphia

www.sciencehistory.org

WikiSalon

A casual gathering of Wikipedia enthusiasts and those interested in learning more. Participants can edit articles of their own choice and suggest articles needing improvement to the group.

Free and Open to the Public.

Novices are encouraged to attend.

Sunday, October 14 at 1pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurelhillemetery.org>

The Worlds of Thomas Jefferson at Laurel Hill

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; but their stories refuse to conform to those tenets, boldly demanding to be

told. This walking tour will be led by foremost Jefferson scholar and acclaimed portrayer of America's third President, William David Barker (www.thethomasjefferson.com), who will be visiting Laurel Hill from his home in Williamsburg, Virginia.

The cost is \$15/person, \$13/students and seniors, or \$12/members. Tickets can be purchased at the door or online.

Monday, October 15, 2018 at 7:00 PM at the Ludington Library located at 5 South Bryn Mawr Avenue, Bryn Mawr, Pennsylvania.

The Freethought Society www.ftociety.org

FS is very pleased to host **Dr. Paul Offit.**

Dr. Offit's topic will be:

"How to Communicate Science to the Public—Or Die Trying."

Using a series of personal experiences, Dr. Offit will discuss the challenges that scientists face in trying to communicate science to the public. Dr. Offit is the Director of the Vaccine Education Center at the Children's Hospital of Philadelphia as well as the Maurice R. Hilleman Professor of Vaccinology and a Professor of Pediatrics at the Perelman School of Medicine at the University of Pennsylvania. He is a recipient of many awards including the J. Edmund Bradley Prize for Excellence in Pediatrics from the University of Maryland Medical School, the Young Investigator Award in Vaccine Development from the Infectious Disease Society of America, and a Research Career Development Award from the National Institutes of Health.

This event is Free and Open to the General Public.

Tuesday, October 16, 2018 at 7:15 PM at the Fels Planetarium, The Franklin Institute, 222 North 20th Street, Philadelphia, PA 19103

The Rittenhouse Astronomical Society

Astronomy lecture open to the General Public. See website for more details:

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

Wednesday, October 17, 2018 at 6:00 PM at the **Wagner Free Institute of Science**, 1700 West Montgomery Avenue, Philadelphia, PA 19121

www.wagnerfreeinstitute.org

The Philadelphia Lantern Slide Salon, 6 - 8 p.m.

Free and Open to the Public

Thursday, October 18, 2018 @ 7:00 pm - 9:00 pm at Commonwealth Chateau, Chestnut Hill College, 9230 Germantown Avenue, Philadelphia, PA 19118

The Institute for Science and Religion

<http://www.irands.org>

How to Pursue Truth – Camille Carlisle, M.S.

What does a successful approach to the intersection of religion and science look like? Using questions posed by her readers and others interested in the topic, Ms. Carlisle will explore where well-meaning enthusiasts go astray. These anecdotes will serve as a counterpoint to examples from a scientific approach to seeking truth in astronomy and physics—an approach that is just as important in theology as it is in science. Her goal

is to equip audience members with a fruitful way of approaching these questions.

Camille Carlisle, a Catholic science journalist and staff editor at Sky & Telescope magazine, graduated from Villanova University with a BS in Astronomy and Astrophysics and from MIT with an MS in Science Writing. Previously, Camille worked at Science News magazine in Washington, DC as the publication's fact checker. Her articles have appeared in Sky & Telescope, Science News, Technology Review, and MIT's webzine Scope. As Staff Editor at Sky & Telescope, Camille handles commissions and edits freelance articles about developments in our understanding of the universe. She also writes news and feature articles (usually about black holes) and blogs intermittently in her online column, "The Black Hole Files." Come join us at 7pm on October 18th! Free Will Donations are accepted and very much appreciated. Light refreshments will be offered.

Thursday, October 18, 2018 at 6:00 PM-9:00 PM at Academy of Natural Sciences of Drexel University, 1900 Benjamin Franklin Parkway, Philadelphia 19103

www.ansp.org

Door 19: Skeletons in our Closet

Knock 3.14159 times on Door 19 for admission to an oddly charming evening that will forever change how you think about science. Curated for the curious, Door 19 is quirky science meets themed soiree, set against a backdrop of live performances, music, potent libations, and dinosaurs. For only four nights this year, you will have the chance to go beyond the galleries and into specimen collections off-limits to visitors, alongside experts who will bring our coolest specimens out to play. Our rogue scientists will go a little bit off script to share their most incredible knowledge—from prohibition-era mixology to dinosaur foreplay. You'll be reminded that no, in fact, you haven't seen it all—far from it.

Door 19: Skeletons in our Closet is presented in partnership with Eight Oaks Craft Distillers and 12th St Catering

Friday, October 19th & Saturday, October 20th at 7 pm at **Laurel Hill Cemetery**, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurelhillemetery.org>

Soul Crawl: Haunted Halloween History Tours

Laurel Hill Cemetery's classic Halloween flashlight tours have become a mainstay of the season. Experience the enchanting art and landscape after dark, as an experienced tour guide leads you along winding, dimly-lit pathways. The extended nighttime walking tours will focus on the cemetery's rich history, and of course, some of the liveliest spirits buried within. Tours will last approximately two hours, and will be followed by seasonal refreshments and cocktails aside blazing fire pits.

Two evenings of the Soul Crawl: Haunted History Halloween Tours are scheduled at Laurel Hill: Friday, October 19 and Saturday, October 20 at 7:00pm, sharp. Attendees are advised to dress warmly, wear comfortable walking shoes, and to bring a flashlight.

The cost for Soul Crawl is \$25/person general

admission. Purchasing tickets in advance is recommended. Tickets can be purchased at the door or online. Upon arrival, register at Laurel Hill Cemetery's Gatehouse entrance, 3822 Ridge Avenue, Philadelphia PA, 19132. Free parking is located in the lot directly across the street from the Gatehouse.

Saturday, October 20, 2018 at 2:00 PM.

**PhACT Lecture.
Topic TBA**

Saturday, October 20, 2018 at 3:30PM - 4:30PM at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104
<http://www.penn.museum/events-calendar>
ANCIENT EGYPTIAN FURNITURE: FROM THE EARLIEST EXAMPLES TO THOSE "WONDERFUL THINGS" OF THE NEW KINGDOM

Examples of ancient Egyptian furniture exist from the earliest periods of its history to the end of the Pharaonic Period, and beyond. This talk explores how the ancient Egyptian woodworker honed his craft over time to produce some of the most beautiful furniture ever created—from the tomb of Tutankhamun. Dr. Geoffrey Killen, Independent Scholar of Ancient Egyptian Wood Technology and Furniture, speaks in this lecture, presented by the American Research Center in Egypt Philadelphia Chapter (ARCE-PA).

Admission: \$10, general public, \$7, Penn Museum members and Penn faculty and staff, \$5, students with ID, and FREE for ARCE-PA members and children under 12..

Monday, October 22, 2018 at 6:30 PM at College of Physicians of Philadelphia, 19 South Twenty-Second Street, Philadelphia, PA 19103

<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

US Book Launch: The Ravenmaster: My Life with the Ravens at the Tower of London with author Christopher Skaife

"If the ravens leave the Tower, the kingdom of Britain will fall..."

In, *The Ravenmaster*, Skaife blends a behind-the-scenes account of working with these remarkable, misunderstood animals with the history, inner workings, folklore, and ghost stories of the Tower of London. Legend has it, going back to Charles II, that if a raven should ever leave the Tower of London, the city would fall, the Tower itself would crumble, and the monarchy would disappear. It is Skaife's job to make sure the ravens are happy, healthy, fed their daily ration of biscuits soaked in blood, and ready to captivate the millions of tourists who flock every year to the world's eeriest monument.

Books will be available for purchase to be

signed by the author. Light reception to follow the program.

This event includes a special pop-up exhibit of Mütter Museum collection items. The Mütter Museum will not be open during this event.

Tuesday, October 23, 2018 at 6:00 PM at World Cafe Live, 3025 Walnut Street, Philadelphia

<http://www.upenn.edu/pennnews/science>

PENN SCIENCE CAFE

See website for lecture details.

Free and Open to the General Public.

Tuesday, October 23, at 7:00 pm to 10:00pm at The Franklin Institute Science Museum, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

SCIENCE AFTER HOURS

Wizard School

Enter the pixelated landscapes that once inhabited the cabinets of your local arcade. Explore the worlds of your favorite video games and discover how current games are bridging the gap between science and education.

This event is 21+.

Due to the popularity of this event, we strongly recommend that you purchase tickets in advance as capacity is limited and may sell out.

Thursday, October 25, 2018 at 12:30PM - 1:30PM at University of Pennsylvania Museum, 3260 South Street, Philadelphia, PA 19104

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

Brown Bag Lunchtime Lecture

NEW RESEARCH IN MEXICO: HERITAGE WORK OF TWO GRADUATE STUDENTS

Hear firsthand accounts of recent research in Mexico at this lunchtime lecture—including "Members Only? Common Assumptions, Recognition, and Defining Communities in Engaged Heritage Practice" by Tiffany C. Cain, and "Defense, Resilience, and Refuge on the Frontier of a Classic Period Maya Kingdom" by Whitaker Schroder, both Ph.D. Candidates in Anthropology at the University of Pennsylvania. The talks are presented by the Penn Cultural Heritage Center. Brown bag lunches are welcome at this free event.

Free and open to the public.

Thursday, October 25, 2018 at 5:30 PM at the American Philosophical Society, Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia

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

The Landmark Julius Caesar

In honor of the American Philosophical Society's 275th anniversary, the Society's 2018 lecture series will feature talks inspired by the APS's history and the work of its Members. Robert Strassler, series editor of the Landmark Ancient Histories, was elected to the APS in 2012.

The Landmark Julius Caesar is the definitive edition of the five works that chronicle the military campaigns of Julius Caesar. Together, these five narratives present a comprehensive picture of military and political developments leading to the collapse of the Roman republic and the advent of the Roman Empire.

Free and open to the public. See website to

register.

Friday, October 26, 2018 at 7:30 PM at 1600 Woodland Rd | Abington, PA 19001

[Penn State University – Abington](http://abington.psu.edu/cultural-community-events)

<http://abington.psu.edu/cultural-community-events>

Friday Night Film: Mostly Martha

Moderator: Dr. Moylan C. Mills, professor emeritus of integrative arts

Universally praised for its narrative drive and carefully sculpted performances, this film combines drama, humor, and poignancy for an unusually satisfying cinematic experience. A highly acclaimed female chef learns that she must have not only a recipe for creating a delicious meal, but also a recipe for creating a successful personal life. Martina Gedeck and Sergio Castellito star.

Admission: \$10. (Free for Penn State students, faculty, and staff. Must show ID.)

7:30 p.m., 112 Woodland Building

Friday, October 26 at 7pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

14th Annual Gravediggers' Ball

The Friends of Laurel Hill Cemetery eagerly announce the date for their 14th Annual fundraising gala, **the Gravediggers' Ball**, as Friday, October 26, 2018 from 7:00pm-12:00am at the Masonic Temple in Center City, Philadelphia.

Over the past decade, the Gravediggers' Ball has raised nearly half a million dollars towards the preservation, maintenance, accessibility and educational interpretation of Laurel Hill Cemetery, the first cemetery in the United States to receive the designation of National Historic Landmark. The growth of the charity event in recent years has generated crucial funding that has helped to develop the cemetery from a little-known historic site to a recognized leader in public programming for burial grounds around the world.

[Visit Gravediggersball.org](http://www.Gravediggersball.org) for more info and updates.

Sunday, October 28 from 1-3pm at Laurel Hill Cemetery, 3822 Ridge Avenue, Philadelphia,

<http://www.thelaurehillcemetery.org>

Fall Family Day: Halloween Picnic and Parade

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! 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 a pumpkin patch, readings from the Storybook Fairy, crafts and – new this year - hay rides throughout the grounds.

Feast on festive snacks, or bring your own picnic. Attendees are advised to wear comfortable clothes and shoes, and children are encouraged to show off their best Halloween costumes! This program is recommended for families with children ages 4-12.

Fall Family Day takes place on Sunday, October 28, beginning promptly at 1:00pm and concluding at 3:00pm. Visitors may enter via Laurel

Hill Cemetery's Gatehouse entrance at 3822 Ridge Avenue, Philadelphia, PA 19132. Free parking is located in the lot across the street from the Gatehouse. The cost is \$5/person general admission. Tickets can be purchased at the door or online.

Monday, October 29, 2018 at 7:00 PM at Scoogi's Italian Kitchen & Bar
738 Bethlehem Pike Flourtown, PA 19031
American Revolution Round Table of Philadelphia,
<http://arrtop.org/>
See website for program details.
Free and Open to the Public.

Tuesday, October 30th at 6:00 pm at **Laurel Hill Cemetery**, 3822 Ridge Avenue, Philadelphia,
<http://www.thelaurelhillcemetery.org>
Oddly Departed: Mischief Night Mysteries

What do a lost cat, Bavarian cream custard, a trip to New Jersey and a whiskey highball have in common? Believe it or not, they all played a role in some of Laurel Hill's most unusual deaths. Embrace the Halloween season while listening to tales of the cemetery's most eccentric personalities and the ways in which they departed this earth. Following the tour will be sampling of autumnal treats and cocktails in the Gatehouse. Bring your own flashlight or purchase one in the gift shop upon arrival.

The cost is \$20/person; \$18/students and seniors or \$17/members. Tickets are limited and advanced registration is suggested. Tickets can be purchased online or at the door.

Thursday, November 1, 2018 at 6:00 PM at the **Wagner Free Institute of Science**, 1700 West Montgomery Avenue, Philadelphia, PA 19121
www.wagnerfreeinstitute.org
A cemetery-themed Weeknights at the Wagner with Aaron Wunsch from the University of Pennsylvania, 6 - 7:30 p.m.
Free and Open to the Public

Tuesday, November 6, 2018 - 6:00pm - 7:00pm at Eastern State Penitentiary, 2027 Fairmount Avenue, Philadelphia, PA 19130 phone: (215) 236-3300
<http://www.easternstate.org/home>
Free. A reception follows the lecture.
The Searchlight Series: Discussion Topic TBA.

Wednesday, November 7, 2018 @ 7:00 pm - 9:00 pm at Commonwealth Chateau, Chestnut Hill College, 9230 Germantown Avenue, Philadelphia, PA 19118
The Institute for Science and Religion
<http://www.irands.org>
Teilhard, Francoeur, and the Religion-Science Debates of the Early 1960
Susan Sack, PhD

Interest in the works of Teilhard de Chardin soared in 1959 following their initial publication. One of the first in the US to grasp the possibilities of his thought was Robert Francoeur. This presentation explores the efforts of Francoeur and several other influential scientists and theologians who used the work of Teilhard to bridge the supposed

gaps between religion, science, and daily life.

Susan Kassman Sack received her PhD in Theology in 2014 from the University of Dayton after a career as professor of Math and Computer Science and as Systems Analyst. Her book, America's Teilhard, which deals with the rise and fall of Teilhard's popularity in the 1960s will be published by The Catholic University of America Press in spring, 2019. Sue presently serves as chaplain at Miami Valley North hospital in Dayton, Ohio and is pursuing certification as a spiritual director. Sue and her husband have been operating a small farm in southwestern Ohio for some three dozen years.

Come join us at 7pm on November 7th! Free Will Donations are accepted and very much appreciated. Light refreshments will be offered.

Thursday, November 8, 2018 at 6:30 PM at **College of Physicians of Philadelphia**, 19 South Twenty-Second Street, Philadelphia, PA 19103
<https://collegeofphysicians.org/events>

Pre-registration for all programs and events is strongly urged

This is a book launch for RUSH: Revolution, Madness, and the Visionary Doctor Who Became a Founding Father by Stephen Fried. Benjamin Rush, a signer of the Declaration of Independence and colonial Philadelphia doctor and civic leader, helped found The College of Physicians of Philadelphia in 1787.

Light refreshments provided after the lecture. The Mutter Museum will not be open during this event.

Saturday, November 10, 2018 at 1:00 p.m.-3:00 p.m. at Science History Institute, 315 Chestnut Street, Philadelphia
www.sciencehistory.org
WikiSalon

A casual gathering of Wikipedia enthusiasts and those interested in learning more. Participants can edit articles of their own choice and suggest articles needing improvement to the group. Free and Open to the Public. Novices are encouraged to attend.

Monday, November 12, 2018 at 6:00 PM at **National Mechanics**, 22 S. Third Street, Philadelphia, PA 19106
Science on Tap

A monthly gathering that features a brief, informal presentation by a scientist or other expert followed by lively conversation. Good food and beer.

Must be 21 or accompanied by parent. Free and open to the Public.
<http://scienceontapphilly.com/>

Tuesday, November 13, 2018 at 6:00 PM at **World Cafe Live**, 3025 Walnut Street, Philadelphia
<http://www.upenn.edu/pennnews/science>
PENN LIGHTBULB CAFE
[See website for lecture details.](#)
Free and Open to the General Public.

Tuesday, November 13, 2018 -7:00 pm to 10:00pm at The Franklin Institute Science Muse-

um, located in Center City Philadelphia, at the intersection of 20th Street and the Benjamin Franklin Parkway.

<http://www.fi.edu>

NIGHT SKIES AT THE JOEL M. BLOOM OBSERVATORY

Join us for an evening of 'out of this world' astronomy activities hosted by Franklin Institute Chief Astronomer Derrick Pitts. 'Night Skies at the Observatory' is a monthly stargazing event connecting you to celestial objects in the night sky including stars, planets, and nebulae using telescopes in Bloom Observatory and at 'Ben's Starlight Lounge' on our 5th floor rooftop observation deck, featuring a cash bar. See website to purchase tickets.

Friday, November 16, 2018 at 7:30 PM at 1600 Woodland Rd | Abington, PA 19001
Penn State University – Abington
<http://abington.psu.edu/cultural-community-events>

Friday Night Film: A Late Quartet

Moderator: Dr. Moylan C. Mills, professor emeritus of integrative arts

Members of an extremely successful string ensemble are at the peak of their long careers when it becomes clear that physical and emotional problems are forcing them to re-evaluate their relationships with their audiences, their music, and each other. This film is a thoughtful examination of the meaning of art and the power of music. Philip Seymour Hoffman, Christopher Walken, and Catharine Keener have never been better as they bring these musicians to life.

Admission: \$10. (Free for Penn State students, faculty, and staff. Must show ID.)
7:30 p.m., 112 Woodland Building

**Saturday, November 17, 2018
2:00 PM.**

**PhACT Lecture. **
Linda Zimmerman will discuss her book "Bad Science: A Brief History of Bizarre Misconceptions, Totally Wrong Conclusions, and Incredibly Stupid Theories"

See page 6

Tuesday, November 20, 2018 at 7:15 PM at the Fels Planetarium, The Franklin Institute, 222 North 20th Street, Philadelphia, PA 19103

The Rittenhouse Astronomical Society
Astronomy lecture open to the General Public. See website for more details:

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

Ω Ω Ω

Philadelphia Area Lecture Host Websites

This listing is likely incomplete. If there is a site you wish listed or a link is erroneous then please email the *Phactum* editor at phactpublicity@aol.com

Academy of Natural Sciences

Monday, January 13, 2013 at 6:00 PM-8:00 PM at The Academy of Natural Sciences, 1900 Benjamin Franklin Parkway, Philadelphia 19103

www.ansp.org

American Philosophical Society

Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia

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

Free and Open to the Public

American Revolution Roundtable of Philadelphia (ARRTOP)

at MaGerks Pub and Grill, 582 South Bethlehem Pike, Fort Washington, Pennsylvania

<http://arrtop.com/>

Last Monday of most months.

Free and Open to the Public

Chemical Heritage Foundation

See Science History Institute

College of Physicians of Philadelphia

19 South Twenty-Second Street, Phila. PA

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

Delaware County Institute of Science

11 Veterans Square, Media, PA 19063

<http://delcoscience.org>

Delaware Valley Opera Company

at the Venice Island Performing Arts Center, located in the Manayunk section of Philadelphia. Turn onto Cotton Street from Main Street and use the Venice Island public parking lot.

www.dvopera.org

2017 Summer Opera Festival

Delaware Valley Amateur Astronomers

in the Radnor Township Municipal Building, 301 Iven Ave, Radnor, Pennsylvania 19087

<https://dvaa9.wildapricot.org>

Free and Open to the Public.

Eastern State Penitentiary

2027 Fairmount Avenue, Philadelphia, PA First Tuesday of every month.

<http://www.easternstate.org/home>

Franklin Institute -

<http://www.fi.edu>

Free Library of Philadelphia (FLOP)

1901 Vine Street, 19103

<http://libwww.freelibrary.org/authorevents/>

Freethought Society

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

Friends of Valley Forge - first Tuesday of the month

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

Free and Open to the Public.



Humanist Association of Greater Philadelphia (HAGP)

www.HAGP.org

Institute for Science and Religion

<http://www.irands.org>

Free and Open to the Public. A free will donation is requested.

Laboratory for Research on the Structure of Matter - Science Cafe

<http://www.lrsm.upenn.edu/events/sciencecafes/index.html>

Laurel Hill Cemetery

3822 Ridge Avenue, Philadelphia,

<http://www.thelaurelhillemetery.org>

Nerd Nite -

<http://philadelphia.nerdnite.com/>

Email us at: nerdnitephilly@gmail.com

Penn Science Cafe & Lightbulb Cafe

at World Cafe Live, 3025 Walnut Street, Philadelphia

<http://www.upenn.edu/pennnews/science>

Free and Open to the Public.

Penn State University Abington

112 Woodland Building at 1600 Woodland Rd | Abington, PA 19001

<http://abington.psu.edu/cultural-community-events>

Pint of Science

<https://pintofscience.us/city/philadelphia>

Rittenhouse Astronomical Society

at the Fels Planetarium, The Franklin Institute, 222 North 20th Street, Philadelphia Astronomy lecture open to the Public. Third Tuesday of every month.

www.rittenhouseastronomicalsociety.org/

Science History Institute

315 Chestnut Street, Phila., PA 19106

<http://www.sciencehistory.org>

Science on the Hill at St. Joseph's University

at Landmark Americana Tap & Grill at 54th and City Avenue, Philadelphia 19131 at St. Joseph's University

<http://scienceonthehill.weebly.com/>

Free and Open to the Public.

Science on Tap

2nd Monday of each month at 6:00 PM National Mechanics, 22 S. Third Street, Philadelphia, PA 19106

<http://scienceontaphilly.com/>

University of Pennsylvania Museum

3260 South Street, Philadelphia, PA 19104

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

Wagner Free Institute of Science

1700 West Montgomery Avenue, Philadelphia,

www.wagnerfreeinstitute.org

Free and Open to the Public

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*.

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

Donation of \$ _____ enclosed for additional support

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

Name: _____

Address: _____

Phone: _____ E_mail _____

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

or to pay online go to
www.PhACT.org

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 premier learning institution and PhACT is pleased to support this goal by having talks on wide ranging, engaging, and educational topics. Students and faculty are invited to be active participants in our activities.

The PhACT Council 2018/19

Bob Glickman, President	David Cattell Ph.D.
David Cragin, Ph.D., Vice-President	Jeffrey Craigin, Teen Member of Council
Doreva Belfiore, Treasurer	Ray Haupt
Becky Strickland, Secretary	David Langdon, M.D.
Eric Krieg, Past President	Tom Napier
Wes Powers, Webmaster	

Phactum is distributed 4 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. Donations are welcome.

Policy For Article Use

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

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

Phactum Editor, Ray Haupt
phactpublicity@aol.com

The PhACT website is: www.phact.org

“I believe there are more instances of the abridgement of freedom of the people by gradual and silent encroachments by those in power than by violent and sudden usurpations.”

**James Madison, (1751-1836),
fourth President of the United States (1809-1817)**

