

Phactum

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

October 2010

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"There are only two things a child will share willingly -- communicable diseases and his mother's age."

Dr. Benjamin Spock (1903 - 1998)

PhACT Meeting

Saturday, October 16, 2010 at 2:00 PM

Dr. David Cattell, Chairman of the Physics Department of Community College of Philadelphia, will host Dr. Catherine Fiorello, Professor of Psychology at Temple University.

At Community College of Philadelphia. In Lecture Room C2-28 of the Center for Business and Industry.

Enter at the corner of 18th and Callowhill Streets

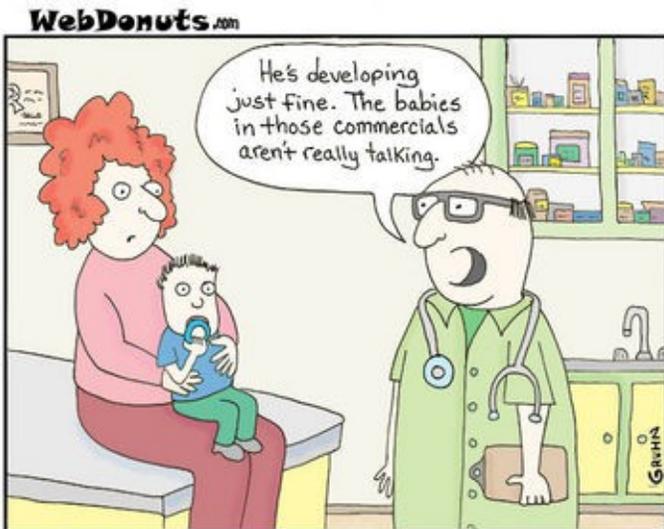
This meeting is free and open to the public.

Myths of Psychology and Child Rearing

Will boosting my child's self-esteem lead to a better life? Will cutting out sugar cure my child's hyperactivity? Will our children do better in school if teachers match instruction to their learning styles? Does teaching children about sex or homosexuality make them promiscuous or gay? Will holding my child back in first grade give him time to mature? Does DARE cut down on alcohol and drug use by students? Does spanking make kids more obedient? Does breastfeeding make kids smarter? Is "teaching to the test" a waste of time? Is there really an epidemic of autism?

Dr. Catherine Fiorello is Assistant Professor and Director of the School Psychology Program at Temple University. She is best known for her work on cognitive

(Continued on page 2)



Cartoon by Gruhn
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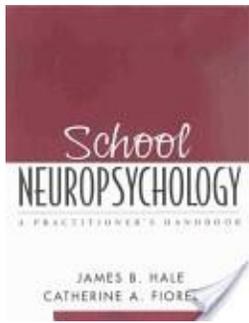
"Random chance seems to have operated in our favor" -- Spock

"In plain, non-Vulcan English, we've been lucky" -- McCoy

"I believe I said that, Doctor" -- Spock (The Doomsday Machine)

and neuropsychological assessment and is co-author of the bestselling *School Neuropsychology* with her colleague Brad Hale. In this presentation, Cathy will cover a variety of research findings from psychology and education that are relevant to raising children today.

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School Neuropsychology A Practitioner's Handbook

By
James B. Hale and
Catherine A. Fiorello

Pub. Date: June 2004 Publisher: Guilford Publications, Inc.

Series: Practical Intervention In The Schools
ISBN-13: 9781593850111 ISBN: 1593850115
328 Pages Price \$40.00

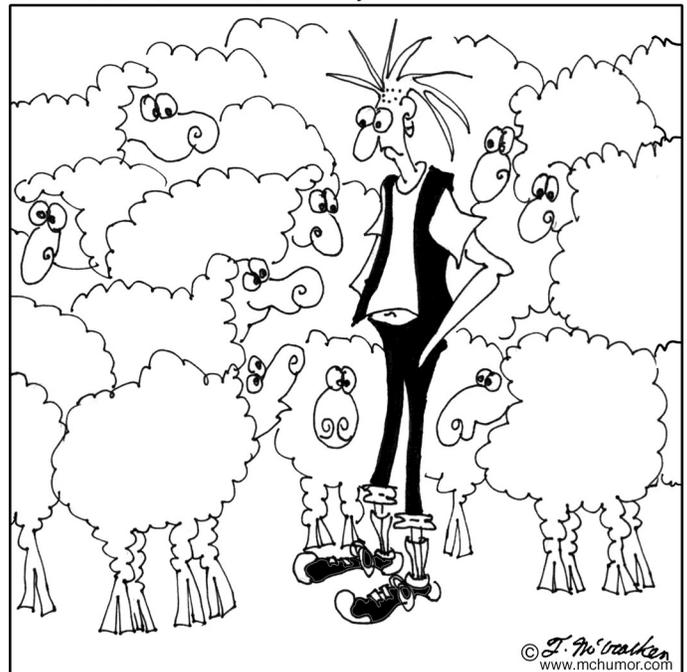
This important resource presents the latest information on brain-behavior relationships and describes ways school practitioners can apply neuropsychological principles in their work with children. Bridging the gap between neuropsychological theory, assessment, and intervention, this accessible text addresses complex topics in a straightforward, easy-to-understand fashion. The authors challenge previous conceptions about brain functions and present the cognitive hypothesis-testing model, an innovative method that helps practitioners form accurate understandings of learner characteristics and conduct meaningful and valid individualized interventions with children with a range of learning and behavior disorders. Including case studies and examples that illustrate what practitioners might actually see and do in the classroom, the volume comes in a large-size format with reproducible worksheets and forms.

**“All God's children are not beautiful.
Most of God's children are, in fact, barely
presentable.
Even when freshly washed and relieved of
all obvious confections, children tend to be
sticky.” ~ Fran Lebowitz**

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MCHUMOR.com by T. McCracken



“You think YOU have peer pressure!?”

Cartoon by T. McCracken
<http://www.mchumor.com/>
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You are invited to participate in Phactum. Constructive letters and articles are always desired and the possibility of topics is endless. All you need do is find time and motivation.



Sylvia Plath committed suicide in 1963. In 1982 she was the first poet to posthumously win a Pulitzer Prize.

Cast aside your self doubts about writing. Investigate a topic that interests or bugs you, write it up, and send it in. We do wish to avoid unduly harsh broad brush criticism of religion and we try to not engage in fractious partisan politics. Feel free to denounce the editor, suggest improvements to Phactum, letters of opinion, submit poetry ... and more Clerihews, please!! A great recipe for lasagna is always desired.

“And by the way, everything in life is writable about if you have the outgoing guts to do it, and the imagination to improvise. The worst enemy to creativity is self-doubt.”

~Sylvia Plath (1932 - 1963)

Letters to the Editor

Editor: Actually, the first major link between smoking and lung cancer was from the British Physician's (BP) study by A.B. Hill. There was another study by Sir Richard Doll, but it was a case-control study...not quite as good as a cohort study. The cohort study is the gold standard type study in the field of epidemiology where a group of people is followed (in this case, physicians) for a specific time period (ten years for the BP study). The benefit of this kind of study is they survey the person about all kinds of exposures and habits and then see what kind of diseases they develop over the time period they are participating in the study. In the A.B. Hill study, physicians were asked about their smoking habits (never a smoker, previously a smoker, still a smoker). Through the survey process and through biostatistics, it showed that those physicians that smoked were something like 18 times more likely to die from lung cancer versus those physicians that didn't smoke. So the Nazis had nothing to do with it...but it's a good conversation starter!!

Marie L. Socha, MS, MSPH, DrPH
Madison, AL

Editor: In the "Various Ruminations" of the Sept. 2010 issue, you address Stephen's Ark. I'd like to respond, by way of moderating. That "the long-term future of the human race must be in space" is a rather vague proposition, but it is inarguable that "space" is the sole alternative to humanity having "all its eggs in one basket."

I propose that we need not jump straight to extremes. "In

space" might well mean NEAR space, such as in space stations just far enough away to preserve "human life" from impending catastrophe. We don't necessarily need "to transport a significant civilization to a new location," but merely to set up an emergency retreat for short-term use by a relatively small population. Sure, there would be major issues to contend with, but if faced with extinction, couldn't we muster the support to save "just enough" of life here on Earth to give it a new start again (also here on Earth), after things settle? To "re-seed" our planet, so to speak?

Sure, it's Sci-Fi, but why couldn't we spend some time studying and planning and running supercomputer analyses, just to see what such an effort would require, what sort of self-sustaining temporary retreats we could possibly build, and thrash out the arguments now, while we (apparently) have a little time to spare? Many of Jules Verne's ideas were pure Sci-Fi when he wrote them down, yet there are a few that we've managed to bring to fruition in the generations since. Hawkings is one of our modern Vernes, offering just enough of an idea for the rest of us to debate, develop, and maybe even solve, after untold cycles of thought and revision. I think that his premise is worth taking seriously, even if we can't yet see an immediate practical application.

Paul Schlueter III
Dallas, PA

Editors note: See [Extrasolar Planet Update](#) on page 4.

Editor: In my "Developments in Paleontology" piece, p. 19, it says, "We appeared in Europe about 4.4Kya;" the decimal point is a mistake, probably an ink flake from my typewriter ribbon, that was accidentally scanned into that location.

I'd hate to provide fodder for the Young Earthers! It should have read 44Kya. To bring things even further up to date, Svante Paabo, of the Max Planck Institute of Evolutionary Anthropology in Leipzig, Germany, has been reported to have sequenced 60% of the Neanderthal genome.

According to Archaeology Magazine (Jul/Aug-2010), "Neanderthal-Genome Decoded" by Zach Zorich), preliminary studies show that all non-African modern humans share a small percentage of Neanderthal genes. This is extrapolated to indicate that homo sapiens who left Africa around 100Kya to 80Kya "encountered Neanderthals in the Middle East, where the two populations interbred before homo sapiens moved into the rest of Eurasia." Though only five population groups were actually compared in this study, neither of the two African groups showed Neanderthal DNA, because "either people did not move back into Africa once they left, or the DNA of those who did come back was diluted in [Africa's] large human gene pool."

Homo species may well have flowed from Africa in something more like a stream than isolated migratory pulses. Current evidence suggests that the Neanderthals actually evolved in Europe and the Near East, while Sapiens first appear in the fossil record as an Eastern African species, before gradually migrating throughout the modern world, and there is now some DNA evidence that those of us who left Africa interbred with Neanderthals as we dispersed. Many further details are expected as researchers adopt better, faster methods of analyzing ancient DNA, and more precisely trace the unique genetic heritages of distinct modern regional populations.

Paul Schlueter III
Dallas, PA

Editor: Enough with the anti-gambling propaganda already! The only articles about gambling relevant to PhACT would be about how gamblers don't understand the odds or believe that hot streaks will continue and things of that nature, but that's not what Phactum's anti-gambling diatribes are about.

Howard J. Wilk
Philadelphia, PA

Editor: I have always enjoyed Paul Schlueter's erudite and entertaining articles in the Phactum, including the most recent one about the weaknesses of statistics. There is, however, an error in the explanation of the P value, in the paragraph describing the theoretical drug trial. In statistics, the P value is the probability that the results found are due to chance. More formally, it answers the question "If the phenomenon being tested actually has no effect, what is the probability that an effect at least this strong would be found in our data?" In our example, a P value of .05 (5%) does not refer to 5% of the subjects showing an effect; rather, it means "Given that this drug seems to show a moderate (or strong, say; we do not have this information in our example)

therapeutic effect, how likely would we be to get this result if the drug were actually ineffective?" Obviously we want this number to be as small as possible, because 5% is a relatively large chance of coincidental findings being reported as an effect. $P = .05$ is used as a target arbitrarily, but $P = .005$ (or smaller) is preferable.

Daniel Glass
New Paltz, New York

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Various Ruminations

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

Extrasolar Planet Update, July 2010

How quickly science progresses. Paul Schlueter contributed this little item.

In the July 3, 2010 issue, Science News reported the addition of more than 700 new "candidates" for the roster of extrasolar planets, bringing the total to well over 1,100. Ron Cowen reported, in "Kepler promises planetary bonanza," that the orbiting Kepler spacecraft, a NASA project, has found 706 stars which display the minute flickering of light output that may indicate planet transits (planets passing in front of the star). Five of these stars show preliminary indications of having multiple planets.

Before Kepler began operating, the number of known extrasolar planets was about 460. Kepler only began searching the skies in the spring of



Cartoon by Nick D. Kim
<http://www.lab-initio.com>
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2009. 156,000 stars were observed. in this early search. Further analysis of Kepler data, plus data from other observatories, will be needed to verify the status of these planets, which range from a mass of two Earth's to greater than Jupiter's. The "most interesting 400" of these planets, orbiting some of the brightest stars Kepler has observed, are thought to hold the greatest promise for finding Earth-mass planets (so far, nothing the size of our own planet has been found).

A lead scientist for the Kepler team, William Borucki (from NASA's Ames Research Center in Moffett Field, CA), posted these early findings at arXiv.org on June 15. Further analysis reports are expected by February.

Goldilocks Planet

In the September edition of Phactum we did note Stephen Hawking's sci-fi sounding observations that Man's last refuge is in Outer Space. Since then scientists did announce, in late September, discovery of a "Goldilocks Planet" orbiting a star called Gliese 581. A Goldilocks Planet is one that orbits its sun at a distance that might be agreeable to sustaining some form of life. This particular Goldilocks Planet is a mere 20 light years from home, about 120 trillion miles. The planet is about three times the size of Earth. Whether other conditions needed to sustain life are present is not really known at this time. Stay tuned.

http://news.yahoo.com/s/ap/20100929/ap_on_sc/us_sci_new_earths

Federal truth-in-credentials bill reintroduced.

I often hear "infomercials" on radio and TV hawking one miracle potion or another guaranteed to restore vigor, maintain wellness, and prevent the malady du jour. The presenters make extravagant claims of their products and often, it seems, extravagant claims of their own credentials. Most seem to be chiropractors engaging in the chemistry of vitamins and supplements.

Perhaps some answers will be forthcoming as indicated by this note from Dr. Stephen Barrett's Consumer Health Digest of September 4, 2010.

U.S. Representative John Sullivan (R-OK) wants to make it easier for consumers to evaluate health-related credentials. His (Healthcare Truth and Transparency Act (H.R. 5295) would make it illegal for people offering health care to misrepresent their education, training, degree, or clinical expertise, or whether they hold a state license. The bill, which was originally introduced in 2006, would also order the Federal Trade Commission to investigate the extent of misrepresentation of health-related credentials and report back to Congress within one year.

http://www.aapmr.org/zdocs/hpl/healthcare_truth_act.pdf

Canberra Skeptics

We are pleased that the skeptics in Canberra, Australia have recently added links to the PhACT website and Phactum to their website which you may visit at:

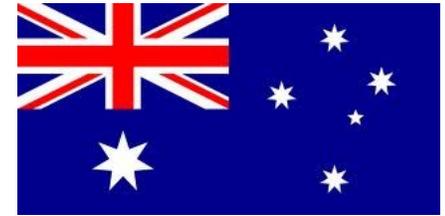
<http://www.canberraskeptics.org.au/>

I did know that Canberra was the capital city of Australia, but I must confess that I did not know where it is located. I am of the impression that a lot of other American's are equally ill informed about the political geography and location of cities in other lands, so here is a very brief lesson about Australia.

Australia is a vast country of nearly 3 million square miles and a population of about 22 million humans plus plenty of kangaroos. The nation is a parliamentary democracy consisting of five states and three territories on the mainland, plus Tasmania, a large island in the south which is also a state.

Canberra, is situated in the Australia Capital Territory (ACT), which in turn is situated in the state of New South Wales (NSW) in the southeast region of the continent. Canberra is the only state or territory with no sea coast.

Australia has been inhabited by humans for around 40,000 years. The first Europeans to see the Australian continent were Dutch sailors commanded by Willem Janszoon in 1606. The discovered land eventually was named Australia, the name being derived from the Latin



australis meaning southern.

It would be good to know more about Australia, and one day I do hope to get there to visit ... but where does one begin a grand adventure in so a vast country? I think I shall ponder that Cosmic Question with a can of Fosters!

The Pop Culture of Lady Gaga debunked

Pop Personalities such as Stefani Joanne Angelina Germanotta, aka Lady Gaga, are not often addressed in Phactum, but provocative culture critic Camille Paglia did express some thoughts on the matter in London's Sunday Times Magazine of September 12, 2010. Paglia clearly is not favorably impressed by the vapid pronouncements, ever more over the top costumes, and downright unlistenable music of Gaga. One can only wonder how long the extravagant exhibitionism of Gaga will appeal to a large constituency of indiscriminate consumers of such fare. Sadly, Gaga is likely to be on the scene for a long time substituting chutzpah for talent.

It appears that Barbara Walters would not agree with Paglia having declared in 2009 that Gaga is one of the ten most fascinating people of the year. Yeah.

Camille Paglia has achieved considerable fame as a social critic, a feminist, and hard to pigeon hole political commentator having been accused of being both extreme liberal and extreme conservative, of being an ultra-feminist and worse than Hitler. With such criticism she must be doing something right.

Paglia lives in or around Philadelphia and is Professor of Humanities and Media Studies at the University of the Arts in Philadelphia since 1984.

The Gaga article can be found at:

<http://www.thesundaytimes.co.uk/sto/public/magazine/article389697.ece>

Gambling Notes

♠ Get a load of this website. A MegaMillions lottery simulator is available as an instructional tool as to how hopeless the odds are for an individual gambler. The program facilitates playing twice a week for ten years.

I played ten times to simulate a century thus "betting" 10,400 times and "spending" \$10,400. My "winnings" came to \$1160, the best decade yielding \$230, the worst yielding \$60. Odds to win on a single play are 4.27^{-11} or more dismally dramatic: .000000000427

Mega-depressing MegaMillions lottery simulator online:
http://www.cockeyed.com/citizen/poker/lottery_simulator100.php

♠ Casino Stats - Why Gamblers Rarely Win - To say casino gambling is a lucrative business would be an understatement. Last year, commercial casinos brought in a gross revenue of about \$31 billion and Indian casinos cashed in for about \$26 billion 'Once you step foot into a casino and exchange your money for chips, you've sold away your only advantage, which is staying out of the casino to begin with'.

<http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2010/09/09/investopedia46940.DTL>

♠ Philadelphia becomes largest U.S. city with a casino— Philadelphia took the title of largest U.S. city with a casino when Pennsylvania's 10th gambling hall opened this month despite years of community protests and delays.

http://www.usatoday.com/news/nation/2010-09-27-phillycasino27_ST_N.htm

♠ Gambling website offers cash to make the grade - Think you can get an A? Want to make a bet? That's what New York-based website Ultrinsic.com lets students do. The grade-gambling service offers up to \$2,000 on graduation day to a student who wagers \$20 at the beginning of freshman year that he or she will finish college with a 4.0 GPA and follows through... and that's not the only payout. More than 1,000 new students have registered. Officials at Pennsylvania State University denounced Ultrinsic as "dangerous gambling" and have threatened the site with legal action if it attempts to access students' personal information.

<http://www.stanforddaily.com/2010/09/20/gambling-website-offers-cash-to-make-the-grade/>

Soundbites

Compiled by Becky Strickland

► Double-blind placebo controlled isn't always easy! "It is hard to design trials. In one study, most people guessed whether they had been given ecstasy or not." New Scientist, September 4, 2010. Ecstasy is currently being tested as a treatment for those suffering from post traumatic stress syndrome.

► On August 24, a Hawaiian appeals court absolved in advance the US Department of Energy, the National Science Foundation and other funding bodies of responsibility for any dire event that might occur in the Large Hadron Collider at CERN near Geneva, Switzerland. Phew. From New Scientist, September 4, 2010.

► "What if I pulled through and the pious faction contentedly claimed that their prayers had been answered? That would somehow be irritating." - Christopher Hitchens in Vanity Fair magazine, October, 2010. Hitchens has been diagnosed with throat cancer. Of the people who've written to him since the diagnosis, some have assured him they wouldn't offend him by offering prayers, others have stated they will pray for him anyway. Hitchens suggests we not trouble deaf heaven with our bootless cries - unless it makes us feel better.

September 20th was designated "everybody pray for Hitchens day".

September 2010 Meeting Report

By Becky Strickland

Our speaker for September was Paul Barnett, who has written many books on science under the name John Grant. (See Phactum, September 2010, for descriptions of 4 of his books, Discarded Science, Corrupted Science, Bogus Science and Denying Science). Barnett discussed science denialism and the reasons for it.

He noted that present day denialism is willful- there is scientific evidence in abundance but many people would rather believe there's a conspiracy than face the truth (or admit they've been wrong). Science denialism hurts people, and has the often realized potential to kill people. And it doesn't change things. Denying gravity won't prevent people from falling down stairs.

How many types of denialism are there? Let me count the ways....oh, no, there are too many to count or track. Denialist's beliefs can be hilariously inconsistent. Various polls (Gallup, CNN, Harris, U of Texas, Texas Tribune....) show that 75% of respondents believe in heaven but only 62% believe in hell. 45% believe the earth is only a few thousand years old but 81 % agree with scientists that dinosaurs lived millions of years ago. Barnett calls science denialists 'bozo sapiens' and wondered if those who deny the germ theory of disease still wash their hands before a meal.

We are hardwired to believe what we are told. Think of primitive people in the bush: best to believe your neighbor if he tells you there's a saber tooth tiger up ahead rather than go check for yourself. But science must work differently. Everything must be questioned, scrutinized, double checked and tested.

Those who missed Barnett missed a fascinating, comprehensive presentation replete with British wit. I hope he comes back!

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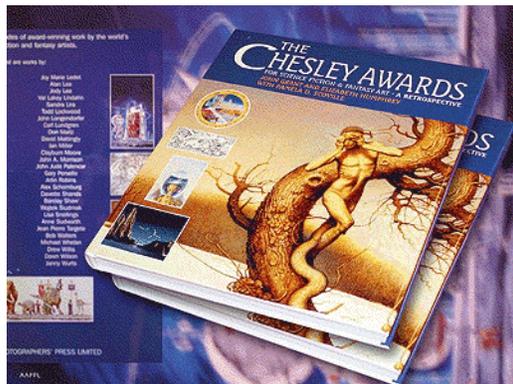
The Chesley Awards: A Retrospective

By John Grant — Elizabeth Humphrey — Pamela D. Scoville
Winner of the Hugo Award 2004!

ISBN: 1-904332-10-2 Hardcover/jacket 192 pages (all in color) Retail Price: \$45.00

A glorious celebration of the very best of the Art of the Fantastic Established in 1985 and named in honour of the renowned Chesley Bonestell, the annual Chesley Awards are internationally respected as the most prestigious in the field of the fantastic arts.

As with the Oscars, the Chesley-winners are decided by the votes of practitioners - the members of the professional body ASFA (the Association of Science Fiction and Fantasy Artists). Those who have won the coveted Chesley can truly regard themselves as at the pinnacle of professional achievement. This book, the first retrospective of the Chesley Awards contains over 300 illustrations, almost all in full colour, as well as copious comments from the winning artists about their techniques and the thought-processes behind the images they create. This is an invaluable reference work for every lover of the Art of the Fantastic - but, more than that, it is a gorgeous treasure trove of images that touch the heart and haunt the imagination.



John Grant is the author of over fifty books, both fiction and non-fiction including books on fantasy art and animation - and is the winner of the Hugo,

the World Fantasy Award, among several other international awards. In 2002 he himself received a Chesley Award for his work. Scottish by birth, he now lives in rural New Jersey with his wife and rather too many cats.

Elizabeth Humphrey is the past President of ASFA. She practises as a sculptor and as a journalist, and is a campaigner for the rights of those suffering from brittle bone disease. She and her family live in South Carolina..

Pamela D. Scoville is Director of the Animation Art Guild, which she co-founded and is among the world's top appraisers of animation art. She is married to John Grant.

Denying Science

By Said Elmenyawy

Author John Grant presented a sneak peek of his upcoming book “Denying Science: Conspiracy theories” during his talk on September 18, 2010. “Denying Science” is a continuing book in the series of three books and discusses various questions, denial of science being the biggest. Grant is a writer and not a professional scientist but he raised questions that many people ask today. Due to major climate changes around the globe more and more people start questioning potential dangers of global warming; believing global warming can be climatologists’ conspiracy to protect their jobs. Mr. Grant stressed that another reason for public denial of global warming can be the greed of corporate world and the refusal to see beyond the next quarter’s profits. These people would rather see the world change than admit that their own ways and habits have to be altered. But if global warming problem is to be solved, everybody should combine their efforts.

Grant tried to understand the root of the problem of public deniability and after doing some research on this topic he came to the conclusion that it is ignorance. Grant described a few Gallup polls over the last 10 years. Questions included human race creation, time of dinosaurs’ existence, and possibility of humans and dinosaurs living at the same time. Surveys showed that 81% of respondents believed in dinosaurs’ existence millions of years ago but surprisingly enough the survey of 2010 showed that 30% of questioned people believed that people and dinosaurs lived alongside (and only 41% of respondents disagreed).

Many people question germ theory as a way for doctors and hospitals to force new medications on people and thus earn more profits even though it was scientifically proven that simple action of washing hands can prevent many dangerous diseases and save lives. Many people lack the skill

of analytical thought and become easier targets when faced with nonsense. Some people are deprived of education but are perfectly happy to use religion as a shield to blame plagues as a payment for human sins. People use not just religious but also ideological or infantile reasons to disregard scientific findings.

What makes it harder for scientific facts to be accepted is the creation of fake arguments and debates, and that even scientists cannot always agree themselves. Sometimes denying science takes wild turns like statement from a few self proclaimed nutritionists claiming vitamin C is a better treatment for HIV/AIDS than currently used HIV drugs, or news about Indian Government is investing large amounts of money in research and development of medications made from cow urine for treatment of different diseases including HIV. Public ignorance on the matter can be seen in the results of a 2010 survey that showed the belief of 50% of respondents that the cure had already been developed for HIV.

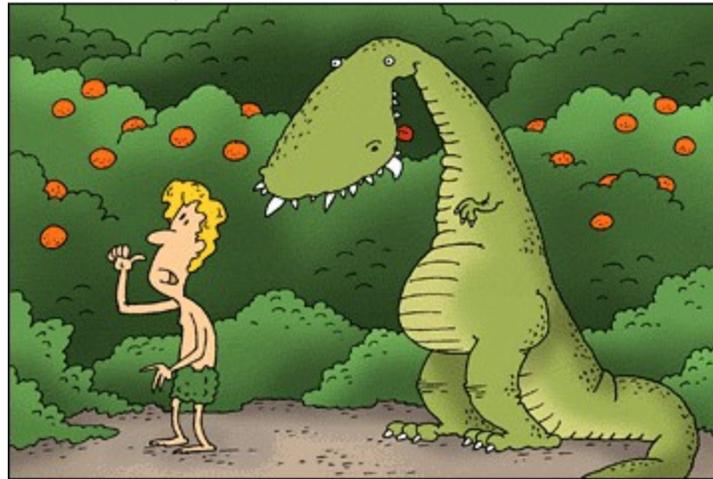
Tobacco companies aim to make people even more science-illiterate by developing and advertising new cigarettes with no additives, when additives are the safest components of the cigarettes and are being eliminated.

Mr. Grant during his lecture raised only few questions without giving full answers and explanations promising more exciting details in his upcoming book.

Said Elmenyawy is a Physics Student of Dr. David Cattell at Philadelphia Community College.

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(See Genesis 1:1-2:3)

09-11-2009

I WANT TO GO AHEAD AND CHANGE THE NAME I
SET FOR 'AAAAAAAAAYAAAAA' TO 'T-REX'

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De-simplifying Juvenility

by Paul Schlueter III

Recent developments in the legal system have brought the issue of the level of responsibility for criminal behavior of juveniles into national dialogue. The U.S. Supreme Court recently held that, because juveniles lack complete development in their brains, they may not be sentenced to the death penalty. A couple of Florida cases are now under U.S. Supreme Court consideration, asking whether it is appropriate to sentence juveniles to Life without possibility of parole in non-homicide cases. These issues have been widely discussed elsewhere, so I want to take the discussion in a different direction.

I will argue that our social and legal systems oversimplify the concept of juvenility. Essentially, we arbitrarily determine that all human persons become "adults" at their 18th birthday. This imposes a false dichotomy on the complex stages and multiple levels of human psychological development. Maturity is not a characteristic that one may don like a sweater, at any specific age. It is something that develops in spurts, over the course of decades. Further, maturity in one area (say, developing responsibility for supporting oneself) may develop at an entirely different time than maturity in another area (say, developing good judgment in regard to personal relationships.) Physical maturity (strongly linked to sexual maturity by the influences of hormones) is usually rather rapid, but its onset point may come at widely distinct ages, and occur differently for males or females.

I suggest that we should recognize multiple stages of human development. Without reference to a formal textbook on developmental psychology, let's broadly discuss some of the more obvious stages.

We can roughly define infancy as the period during which a person primarily nurses on liquid nutrition. Toddlers, simply enough, are weaned children who have yet to develop the independence to interact socially away from their parents' direct supervision. "Children", then, would essentially be semi-autonomous persons, able to function in simple social circumstances, prior to the onset of puberty (approximately ages 4 to 10.) I think it is relatively fair to

draw a line at the 11th birthday, and say that children below that age are not responsible for their actions on anything deeper than a moment-by-moment level. Their liability for any harm or injury to others should fall upon the person most responsible for their immediate supervision and guidance at the time of that action; the child itself should be considered beyond blame. This is not to say that therapeutic interventions should be withheld from children; arguably, if a child begins displaying problematic behaviors, it is probably at this stage in life when professional and evidence-based interventions would be of greatest effectiveness, if necessary.

The solution of adult problems tomorrow depends in large measure upon the way our children grow up today. There is no greater insight into the future than recognizing that, when we save children, we save ourselves.
~ Margaret Mead
(1901 - 1978)

Next comes "Pubescence." Biologically, this can be defined as the time when hormonal changes begin the process of changing a child's body into one physically capable of bearing children. Because physical onset of puberty occurs at various times in individual persons' development, expert (scientific) medical evidence that it has not yet occurred should override any arbitrary determination of the age of its onset. Because pubescents are largely dominated (psychologically speaking) by the unfamiliar hormonal influences of their age, they should legally and socially be set apart and distinguished from pre-pubescent children, yet they also should be held separate from their elder groups. I propose arbitrarily defining the ages of pubescence at 11 through 15. At this stage, pubescents must begin to be held responsible for their behaviors, but only in a manner meant to accommodate severe errors. Rather than punishment, misbehavior should be answered with professional interventions such as intensive counseling. Because pubescents are uniquely sensitive to even the subtlest differences in peer ages, group interactions and social peer influences need to carefully be steered by competent adults. Because sexuality is developing, pubescents should be both permitted to engage in the exploration of their new feelings and urges, and consistently educated in age-suitable and situation-appropriate intersexual relationships. Expert psychiatric evaluations should be able to override purely numerical evaluations of "mental age," and to help minimize predation and exploitation, pubescents should be restricted to intersexual relationships with persons

with their own "mental age" group (persons of this age will largely self-segregate with others of their same numerical age, and shun those whose development either outpaces or lags behind their own.)

Legal responsibility for pubescents should be restricted to treatment and counseling. I think there's sufficient evidence to justify prohibiting the incarceration of anyone under age 15, with the exception of psychiatric commitment which should be used only when determined necessary by specially-trained medical and legal authorities. Parental/guardian responsibility for the actions of pubescents should begin to diminish, with responsibility for problem pubescents being partially taken on by medical and legal authorities. Scholastic education should be mandatory for all pubescent (and younger) children, and authorities should have the ability to enforce psychiatric/sociological treatment programs (even against parental wishes) in cases where the individuals' behavior indicates the need. Because this is largely the last chance to re-direct misguided development in a youth, funding for such treatment should be liberal and public. Pubescent intervention is probably the single most important area for our society to focus its efforts in coming years, because this truly is the age period where most young people begin to establish the behavioral and social habits that will define the rest of their lives. You want to make a difference in the crime rate? This is where to do so!

Let's now define "adolescence" as the next stage of development beyond pubescence. Essentially, the physical development of sexuality has set in, though some secondary sexual characteristics (such as beard growth or breast development) are known to sometimes continue for several years. It's relatively easy to tell when a male has become an adolescent; he proudly declares to the entire world that he knows all he needs to know about life, and expects to be treated "as a man," regardless of the development of other characteristics such as responsibility, foresight, or social empathy. For females, the distinction is less obvious; in some cases, it will manifest itself in the adoption of "mothering" behaviors, such as taking on responsibility for the care of younger siblings (or possibly advanced elders), or

determined efforts to conceive a child of their own. For other females, adolescence is marked by taking on some external interest (charities, activism, volunteerism, sudden academic focusing, or the determination to begin earning a living in the workplace.)

Numerically, let's set adolescence at ages 16 through 20. This conveniently fits in with current landmark ages, such as getting a driver's license at 16, and coming of the drinking age at the 21st birthday. I propose that adolescents should be expected to demonstrate their coming of age for the various responsibilities and privileges of adolescence. Emancipation from parental authority should become a license, to be earned through passing a battery of psychological, academic, and behavioral testing. Driver's Licensing should be granted in progressively-liberal stages, starting with strict restrictions, and only progressing upon demonstration of both good judgment and skill development (insurance companies recognize elevated statistical risk for any driver under the age of 25; such information should be used to develop more subtle and progressive licensing guidelines.)

The right to make contracts, work, and handle personal finances should also be conferred upon adolescents in gradual increments. The current method of suddenly throwing open the doors of full adult fiscal responsibility at age 18 is increasingly problematic, as can be seen by observing how young adults handle their finances. Some privileges/responsibilities, such as obtaining a personal communication license (phone, internet, and written correspondence) should be granted early, to enable adolescents to begin establishing adult social connections, while also giving them the chance to demonstrate the responsibility to pay for them appropriately. Another area of personal independence that adolescents should be able to take upon themselves is insurances for medical and other similar needs (including parenthood; those intending to become sexually active should be strenuously expected to provide themselves with pregnancy insurance, as well as undergoing courses and counseling, in exchange for the privilege.)

I must take issue with the term 'a mere child,' for it has been my invariable experience that the company of a mere child is infinitely preferable to that of a mere adult.
Fran Lebowitz (1950 ..)

A child, like all other human beings, has inalienable rights.
Lucretia Mott
(1793 - 1880)

"Young people are acquiring the conviction that foul deeds are never punished on earth, that they always bring prosperity. It is going to be uncomfortable, horrible, to live in such a country".
Alexander Solzhenitsyn
(1918 - 2008), *The Gulag Archipelago*, 1973.

Boyhood, like measles, is one of those complaints which a man should catch young and have done with, for when it comes in middle life it is apt to be serious.
P. G. Wodehouse
(1881 - 1973)

Voting and military service are two traditional milestones for adolescents; I propose that military service can be extended to persons as young as 16, IF accompanied by restricted duty for younger persons, and requirements for extra academic/vocational education within the military system. I believe that the military is capable of, and responsible enough to be relied on to, establish a formal requirement for demonstrating that an individual has sufficient emotional and psychological development to be granted the right to electively engage in combat duty or other hazardous duties. Compulsory hazardous duty eligibility should be set at the 21st birthday, with an option for the individual to seek discharge if they do not wish to continue past that age in the military. As for voting, why can't a 16-yr.-old vote in municipal matters that directly affect him? Allow persons to vote in state matters at age 18 and in federal matters at age 21. Such progressive and incremental suffrage would reasonably seem suitable to the mentalities of persons of those approximate ages.

Legal responsibility should now be primarily upon the adolescents' shoulders. Some parental responsibility should remain for adolescents still dependent on their parents/guardians, but only within limits that recognize the role an adolescent's own determination to make his/her own decisions has upon the parent's/guardian's ability to supervise the adolescent. Simply put, a kid who is determined to sneak out and go drinking will do so, and the parent shouldn't be held accountable; if a problem ensues, the adolescent must take on the burden of responsibility for his/her own action. The same goes for any criminal behavior; that adolescent should be held legally accountable, under legislatively established guidelines. Probation and similar community-based sanctions (including the revocation of licenses, etc.) should be the default, and incarceration should only follow multiple serious infractions; when incarceration is imposed, adolescents should only be incarcerated with other adolescents, and rehabilitative programming should be given strong support and encouragement. The current trend of declaring minors to be adults for criminal prosecution purposes (always AFTER they commit a crime) should be drastically curtailed; juveniles should be entitled to be treated as juveniles.

Civil liabilities for adolescents should be limited, primarily to prevent punitive judgments from becoming burdensome (in recognition of their still-developing reduced responsibility.) On the other hand, it should be encouraged to hold a careless youth financially responsible for actual financial damages, medical costs, and so on. Where necessary, it should be possible for Courts to mandate that an adolescent enter the workforce and actually work to help pay off incurred liability judgments; for those who might refuse such employment/payments, criminal contempt charges

should provide sufficient deterrence.

In sexual matters, there's a severe current problem with relationships that cross the age-18 boundary. Some states have age-of-consent standards well below that of other states and recognition of close-age relationships in cases of technical statutory rape are inconsistent. If adolescents can demonstrate that they have had an ongoing relationship for, say, at least two years, then they should expect full immunity from "statutory rape" issues when one party happens to cross an arbitrary age limit. Also, a similar "safety zone" should exist for establishing new relationships that cross an age boundary; any 16-yr.-old should be able to form a relationship with someone up to a full year younger, and any 21-yr.-old should be able to establish a relationship with someone two years younger. In general, it should be sufficient to establish a strong social more restricting relationships (for persons under age 25) to within three years more or less than one's own age. If youthful parties wish to establish a sexually active relationship with one another that involves an age difference of more than 4 or 5 years, there should be a means for them to seek out and engage in appropriate guidance counseling, upon completion of which they would formally be granted permission to have sexual relations without criminal consequence (pubescents should not be permitted to engage in a sexual relationship with anyone over a certain age, say 17, or more than three years older.)

This is admittedly more complicated than the "under 18 = jailbait" concept, but it's quite simply unrealistic and unreasonable to brand one as a sex offender for life for being 18, and having sex with a 17-yr.-old partner who may very well have been a sexual partner for years already! How many 21-yr.-olds have had sex with a 17-yr.-old they met in a bar, when the younger person had fake ID? For something so essential to normal human socialization to be so severely constrained by such an arbitrary, unbendable standard is utterly ridiculous, and it is entirely reasonable to establish a more thoughtful means of protecting impressionable or unprepared youth from predatory exploitation by far-older persons. Once persons have reached age 25, it is reasonable to expect that they have sufficient experience and judgment to select fully-adult partners as they see fit.

This brings me to what I'll call "young adults", those aged 21 through 24. The latest medical expertise, taken in conjunction with that insurance company information I mentioned above, indicates that the development of the human brain continues until about the age of 25, so there should be some recognition of this in our discussion of maturity and responsibility. Once one is 21, they should be legally entitled to make any decision they wish, such as

(Continued on page 13)

Bill Dock, an American Hero

By Don Nigrone

We take you now to Grovers Mill, New Jersey.

On Halloween Eve, October 30, 1938 the Mercury Theatre on the Air performed their infamous dramatization of the 1898 H. G. Wells classic novel *The War of the Worlds* on their regularly scheduled Sunday radio program. The broadcast, which used very realistic simulated news bulletins and on-site reporting, told listeners that Martians had landed in Grover's Mill, New Jersey, near Princeton. On the day after the show, the media took photographs of 76-year-old Bill Dock standing on one of the loading docks of the Grovers Mill Company building holding his shotgun with a pipe in his mouth. Those photos subsequently appeared in various publications, including the November 14, 1938 issue of *Life* magazine and the February 3, 1940 issue of *The Saturday Evening Post*. The photo captions indicated that he was ready to fight the Martians. And newspaper articles on November 1, 1938 reported that Dock had gone out looking for Martians after hearing the radio play.

Several facts about Bill Dock before he became famous can be gleaned from the *Trenton Times*, Trenton, NJ, dating from 1889 to 1906. He was a miller in 1889, apparently working at the grist mill in Grover's Mill. Bill Dock married a woman who became Mrs. Jane A. Dock. They had a daughter to whom they gave a new piano as a Christmas present in 1905. And his wife died on February 27, 1906 at her home in Grover's Mill.

A syndicated series of articles which appeared under the title *Our Country* were written by various authors. Carl Carmer wrote a piece for the column entitled *Old Bill Dock -- And Why, Like Jonathan Harrington, He's A Hero To Carl Carmer*. The item, which ran in numerous newspapers on September 10, 1940, stated that Jonathan Harrington heeded the call of Paul Revere and grabbed his musket to fight the British at Lexington where he was mortally wounded. Likewise, according to Carmer, over a century and a half later Bill Dock, after hearing about some invaders on the radio, took his shotgun and went towards the site in Grover's Mill where he thought they had landed. Hence, Carmer thought Dock was like the minuteman.

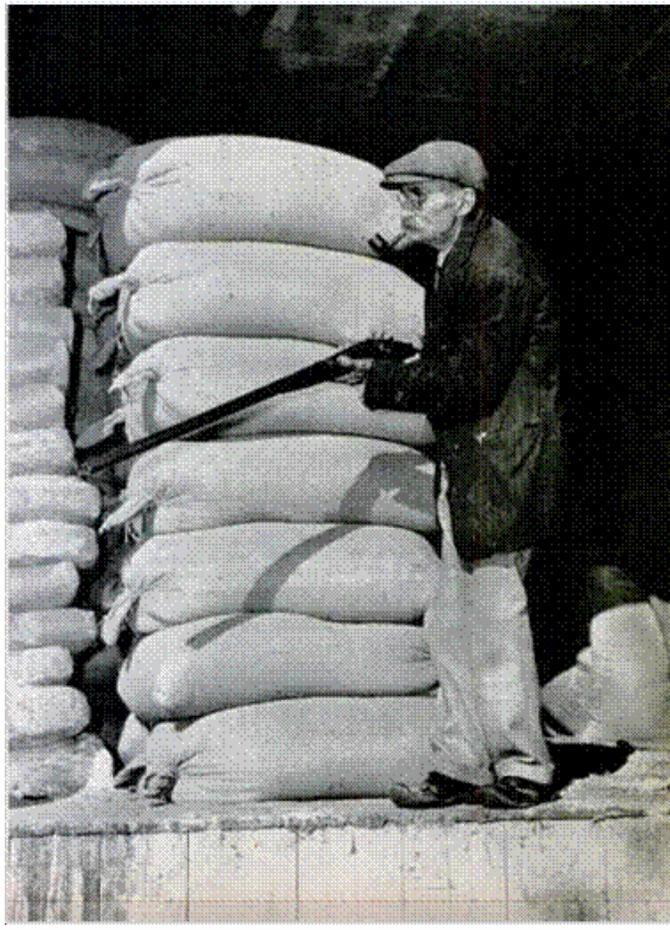


Photo source: Photograph from the November 14, 1938 issue of *Life* Magazine.

In the August 1986 issue of the DC comic *Secret Origins: The Crimson Avenger* we learn that the masked title character debuted in October 1938, months before Batman. The 1986 story takes place on October 30, 1938 and Lee Travis is attending a charity masquerade party in New Jersey during the Mercury Theatre's radio broadcast. Criminals disguised as Martians, dressed in green suits, rob the people at the party and kill two of them. Travis, who will henceforth be also known as *The Crimson Avenger*, and his chauffeur give chase and take care of three of the four thieves. However, the fourth thug is just about to shoot both of them when instead he is killed by a blast from a shotgun. There standing

on his farm is an old man carrying a shotgun with a pipe in his mouth. Yep, The Crimson Avenger was saved by none other than Bill Dock who thought he had just killed an invading Martian!

I believe Bill Dock did indeed grab his shotgun on that fateful October night long, long ago but not to ward off Martians. Instead I think that he was just trying to fend off curiosity-seekers who had descended on typically placid Grover's Mill in droves. When the media launched their own invasion on the day after the broadcast, I suspect they heard that old Bill Dock had been out the night before armed with his shotgun. They talked him into posing for those photographs but I don't think he ever imagined that the descriptions accompanying the photos would make him look ridiculous. Those captions contended that he was ready to fend off Martians when instead he was merely trying to protect private property from earthlings who were trespassing.

Acknowledgment: I am grateful to Bruce A. Clark for research assistance.

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

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(Continued from page 11)

voting, drinking, serving in an army that can order them into harm's way against their will, etc. Such individuals should also have financial responsibility for themselves; and ALMOST complete liability for civil or criminal matters. However, there should also be recognition that development is not QUITE complete, so in matters that involve the greatest consequence, there should yet remain some social safety net for these young adults

Neither the death penalty, nor life without parole, should be imposed on young adults, if they are not yet fully-developed adults in their mentation! Bankruptcy for a young adult should carry a lesser stigma. Even misdemeanors and lesser felonies should carry a more lenient sentence (with preferential rehabilitative attention) than they would for full adults, and eventual expungement of young adulthood criminal conviction should be easier. In short, if we recognize that young adults are still not quite fully developed, we ethically need to extend to them some small, diminishing measure of forbearance and forgiveness that is greater than that we give full adults.

It would admittedly be something of a chore to implement these several stages of development as new legal guidelines, but given the ineffectiveness and unintended consequences of the current two-class system, I argue that it is time to seriously consider just such a revamping of our legal standards. What are your thoughts?

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

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The End Draws Nigh!

Bill Dock heroically protected humanity from the Martian Invasion, but unfortunately his efforts have not carried over to thwart the invasion of East Asian Stink Bugs that occurred in Pennsylvania in the mid 1990's about 50 miles west of Grovers Mill, NJ. Is the Stink Bug Invasion the first sign of The End of The Human Race?

Mike Raupp, an entomologist and extension specialist at the University of Maryland told the Washington Post *"This is the vanguard. I think this is going to be biblical this year. You're going to hear a collective wail in the Washington area, up through Frederick and Allegany counties, like you've never heard before. The [bug] populations are just through the ceiling."*



The Penn State entomology department said in a fact sheet the insect is from Asia, and is a "nuisance pest" in the United States. *"... This insect is becoming an important agricultural pest in Pennsylvania. In 2010, it produced severe losses in some apple and peach orchards by damaging peaches and apples. It also has been found feeding on blackberry, sweet corn, field corn and soybeans. In neighboring states it has been observed damaging tomatoes, lima beans and green peppers."*

Meanwhile, Phactum's Editor is plagued with the little home invaders. Where is Bill Dock when you need him?

The Merits and Faults of Assisted Suicide

by Paul Schlueter III

Dr. Jack Kevorkian is, for better or for worse, a household name. Though he certainly didn't invent the idea of physician-assisted suicide, he is probably more responsible than any other person for bringing the subject out of the darkness of secrecy and shame, and putting it on the table for serious discussion in modern America. He has made himself known across the country for helping the terminally ill to obtain a reliable means of ending their own lives; in so doing, he has paid the price of serving time in prison, having been convicted of this crime of mercy.

It should be noted that, in Pennsylvania, suicide is a felony, as is attempting it yourself, or helping another to attempt it. I write this not to sanction the commission of any crime, but instead to initiate discussion of the ethics of euthanasia, the practicality of having expert information in any attempted action, and the need to ask legislators to change laws if you believe them to be inappropriate.

According to a recent CNN report, the only states which currently permit a physician to assist a patient in bringing about their own death are Oregon, Washington, and Montana. Right to Die, or Death With Dignity, statutes in those states can be researched on the internet. There are also several internet chat rooms and blogs which discuss these issues. It is best that I simply allow those sources to speak for themselves.

The essential question behind the modern efforts to enable people to select their own time and manner of death is whether or not a person should have a right to make that decision for themselves. As critical thinkers, it is unlikely that we acknowledge any "God-given" rights, and as anyone who has ever read a civics book knows, legal rights are obtained by legislation, or by force of arms. We can DECLARE that we hold ourselves entitled to any right we may care to dream up, but if the authorities feel inclined to obstruct the exercise of that right, with or without the support of legislation, they declare that they have the right to inhibit, restrain, prohibit, or prevent the acts of citizens, using just about any means they wish from mild propaganda to violent and/or deadly force.

The irony, where suicide is concerned, is that the Police are entitled to use deadly force to prevent a person from committing suicide! In fact, there is a particular act of some

criminal desperados facing impending arrest, involving either the threat of or actual acts of violence, which then FORCES the hand of Police. The so-called "Suicide by Cop" is any case in which Police must kill a subject in order to prevent him from killing or severely injuring someone else. It can be argued that anyone who attempts a "shoot-out" with Police is deliberately inviting their own killing; this is sometimes what is meant when a fugitive swears that he will not be taken into custody.

Physician-assisted suicide is a much less violent matter. Whether a patient is expecting death in the near future from a diagnosed terminal illness, or s/he simply finds life unbearable for some other reason, it would certainly seem quite reasonable to seek the advice of an expert on human

anatomy, medication, and trauma when contemplating the "best" way to end one's own life. You can jump out a window, but how high does it have to be to ensure swift death? You can try to overdose, but how much of a chemical is required, and which ones cause death without also causing conscious discomfort? You can shoot yourself, but how can you guarantee that you won't simply disable yourself, or cause a lingering death (not to mention the mess involved)? In this day and age, there are uncounted means of using modern technology to commit suicide, but with each of them are questions as to the

certainty of death, the swiftness of dying (few want to actually endure pain for any length of time), the risk of injuring others in the process, and so on. The Internet provides any number of suggestions, but how can you evaluate their credibility? How can you predict your own competence in carrying any of them out?

Ideally, we could perhaps turn to the fictional future of "Soylent Green", in which you simply report to a corporate facility where you are given a private room, music and scenery that please you, and receive un-noticeable intervention that causes your life to simply cease. No muss, no fuss, and after the fact, you literally become the "Green" solution to an overpopulated, under-nourished society.

Of course, our current society demands something called "informed consent," which would mean that the Soylent Corporation SHOULD tell you in advance how your remaining proteins will be used. Whether to feed other people directly ("long pork"), indirectly via a process that

"My thinking tends to be libertarian. That is, I oppose intrusions of the state into the private realm - as in abortion, sodomy, prostitution, pornography, drug use, or suicide, all of which I would strongly defend as matters of free choice in a representative democracy."

Camille Paglia (1947 ...)

makes human protein unrecognizable, or through the feeding of human protein to other animals on which we'd later feed (cattle and pigs are routinely fed beef/pork protein even now; what do they feed fish farms, etc.?), I think that it's just about inevitable that we humans will eventually come to the point when we must actually feed on one another to continue thriving here on this ever-more-depleted planet.

What about organ transplantation? If someone has a compatible organ that someone else needs, and the recipient is more useful to society than the donor, why shouldn't the donor have the option of choosing to sacrifice their life to save the recipient's?

Today's discussions are much more fundamental. The question is whether or not a terminally ill person, particularly one likely to suffer considerably, should be permitted to die at a time of their own choosing, in a manner they can reliably expect to be painless? Should a physician (or, if that profession's Hippocratic Oath gets in your way, perhaps a member of a whole new dedicated profession) be legally permitted to provide you assistance in carrying out your will? Does ANYONE have the right to insist that you endure pain, the indignities of medical care (even if pain is controlled), or even just the persistent feeling that your life is useless and unnecessary?

How much must the feelings of your relatives be taken into account? Presumably your dependents have some entitlement to your continued support, and almost certainly it would be unreasonable to expect an insurer to provide for your survivors if you have chosen to end your own life. But finances aside, what weight should be placed on your siblings' desire to enjoy your companionship? What if your lover still finds you to be important and necessary? What if your child simply won't accept that you're living in a state of misery, and selfishly demands that you be forced to live until God ends your life? At what point on the scales of social justice and personal freedom does someone else's wishes outweigh yours, where your own life is concerned?

We can find some small measure of precedent in Abortion law. The law makes determination as to "when life begins," and uses that in part to balance a potential parent's right to terminate a pregnancy with the fetus's right to be carried to full term. The law also currently has something to say about "when life ends," in matters where a trauma patient is comatose or "brain dead," in determining when relatives may "pull the plug" on life-extending machinery, and so forth. It is routine for Jehovah's Witnesses to prepare

"living wills" that instruct their relatives and medical care providers NOT to infuse them with blood or blood products, even when such intervention might reasonably be life-saving treatment - and as a "religious right," most health care providers will observe such wishes (even when family objects strenuously). You may even prepare a living will, in most jurisdictions, that states your own preferences as to how much intervention you wish (or wish to decline), should you

be unable to communicate; such instructions are legally binding. Isn't it just a matter of degree, when distinguishing between (a.) a living will that prohibits the use of a respirator or feeding tube or blood transfusion; or (b.) instructing your doctor to administer a lethal dose of morphine when you're dying of a painful cancer?

I can't effectively cover all the potential issues of this complex topic in a short newsletter article. However, I hope that reading this opens your eyes to some of the complexities, and some of the expectations that people on both sides of this issue might have. As an association of Critical

Thinkers, perhaps PhACT and its membership should discuss what role PhACT might wish to take on in this discussion. It's not going to go away, but it is going to be discussed sternly and dogmatically by certain OTHER groups, who feel that it is their place to impose their ideals on others. Are there enough members who feel strongly about this issue to form a committee to debate the subject with other groups? Does PhACT want to keep a low profile on this, and redirect potential questions to other groups who have a closer focus on the subject? With "You Don't Know Jack" out in the theaters now, and sure to be out on DVD soon, wouldn't you say that the time has come to decide what course this association wants to follow?

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



Cartoon by Grea
<http://www.sangrea.net/free-cartoons/>
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**What difference is there between a smoker and a suicide, except that the one takes longer to kill himself than the other? ~ —
 Jacob Balde (1604 - 1668)**

Dic Tnickene Trunkenheit (Drunk without Drinking) (1658).
 Quoted in Count Egon Corti, A History of Smoking,

**A Special Edition of PHACTUM will offer a preprint of a pending publication on
THE PHYSICS OF FREE WILL**

DISCUSSION invited at <http://www.quicktopic.com/45/H/LknHgD5uY2X> (or type tiny.cc/6vlwn)

DIGITAL VERSION will be available at <http://phact.org>

**ABSTRACT of PREPRINT:
THE PHYSICS OF FREE WILL
© 2010 A. Granville Fonda**

In a nutshell - Each of us is a sensitive, intelligent, considerate, and adaptive automaton.

Our ethereal minds - the majority of us are convinced - mystically interact with our physical bodies; and that explains self and free will. Others say No, there can be no interaction between the nonphysical and the physical. But if it's all physical, then what is the explanation for self and free will?

In a review of the history of this question, the author recites more than threescore aspiring solutions. A full solution emerges, however, only with the application of modern control system concepts. Here's how.

Tenably the self consists, as Hume held, of nothing but "bundled" memories of perceptions. Using them, to infer "meaning" from raw experience we must construct scenarios appropriate to the experiences. Therefore, our memories include numerous "just-so stories" - useful fabrications, new and old.

One such construction is the very concept of "self" as an entity - and that ties together the bundle. Another construction is that what the body is observed to currently be doing is what the self has chosen to do, and this constitutes the feeling of free will. Other constructions are anticipatory; that is, based on the past and the present we maintain a repertoire of rehearsals for the future. Muscular action ensues, as James correctly held, when one rehearsal for action gains dominance and is enacted - sometimes with a focus of attention, sometimes with no such attention.

The novelty is this: to consider this bundle of perceptions and this repertoire not to be static, but dynamic - varying in time. Mental functions can be reconfigured literally in the blink of an eye. If metaphorically the mind is a theater, the theater company's repertoire is being persistently and instantly revised by immediate sensory experience. By re-entrant cognitive repertoire theory the self is not stuck in time - rather, it is rebuilding and reconstructing itself even as it acts.

Ongoing self-revision is a process in which a dynamic Self is comprised not alone of what previously did happen - or was planned to perhaps happen - but also of fresh memories of what just now did happen. This new information instigates new plans as to what might yet happen. No sooner

do we work the plan, than we re-work the plan. The result is that, in every instant, in the place of the old self stands the new self.

All this is consistent with general neuroscientific observations. Certain synapses do form memory traces by means of long-lasting activity-dependent changes in synaptic strength - and other neurons do energize the muscles as rehearsed. Nothing supernatural is involved.

Our "self" thus consists of our immediate as well as our distant memories of our own constructions and rehearsals, descriptive of what we have been, what we are, and what we might yet become. According to its merits one rehearsal or another becomes dominant, and with or without focal attention that potent rehearsal governs a muscular enactment. This all flows as a physical cascade of causation, given our memories as they are at each instant. But in every instant, due to ongoing sensing those memories change.

As seen from the outside, physiologically speaking, this is a predestined, physical, determinant sequence. We are automata. Yet as seen from the inside, psychologically speaking - as seen by the self doing the encountering - it is simply "me, doing my own thing" - within the constraints imposed by those memories.

Free will, then, is indeed free, as the activity of the brain as seen from within. Yet, as Spinoza said, it is simultaneously determined, every event having a reason, in every respect causally determined according to consistent physical law. Neither view denies the other. Neither need there be any ethereal connection between our minds and our bodies.

We can do as we will even though, as Schopenhauer said, we can will only as we must. And we are not merely condemned to be free, as Sartre said; we are, whether we like it or not - and we do like it - determined to be free.

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Editors note: This abstract refers to a much longer article by Al Fonda that will appear alone in a Special Edition of Phactum that will be distributed only by way of electronic files on the internet.

This will be the first Special Edition and we hope not the last. Others are invited to submit for consideration articles that are too extensive for our normal publication.

PHACT CALENDAR

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 \$3.75 for all day. Enter the college parking lot on 17th Street which is one way south bound. This meeting site is handicap accessible. **PhACT Meetings are free and open to the public unless otherwise noted.**



Saturday, October 16, 2010 - Dr. Catherine Fiorello, Professor of Psychology at Temple University will give a talk on "Myths of Psychology and Child Rearing". Will boosting my child's self-esteem lead to a better life? Will cutting out sugar cure my child's hyperactivity? Will our children do better in school if teachers match instruction to their learning styles? Does teaching children about sex or homosexuality make them promiscuous or gay? Will holding my child back in first grade give him time to mature? Does DARE cut down on alcohol and drug use by students? Does spanking make kids more obedient? Does breastfeeding make kids smarter? Is "teaching to the test" a waste of time? Is there really an epidemic of autism? In this presentation, Dr. Fiorello will cover a variety of research findings from psychology and education that are relevant to raising children today.

This meeting is free and open to the public. For more details see Page 1.

Saturday, November 20, 2010 - "Cosmology and Crackpots". Prof. Dave Goldberg, Drexel University Department of Physics

Saturday, January 15, 2011 - Prof. Massimo Pigliucci, a professor at the City University of New York. He will speak on the topic of his new book "Nonsense on Stilts"

Saturday, February 19, 2011 - TBA

Saturday, March 19, 2011 - Michael Epstein, a professor of chemistry at Mount Saint Mary University in Maryland will speak on "A Skeptic's Journey to the Paranormal and Back".

Friday, October 8, 8:00 PM: Delaware Valley MENSA General Membership Meeting: The Role of Magic & Witchcraft in Modern Society, Speaker: Ms. Diane Wing, M.A.

Society is immersed in the everyday use of symbols and phrases that trace back to ancient magic and witchcraft practices and beliefs. While fear of the occult has limited the exploration of these practices by many, more are opening to the potential and original intent of these philosophies. In modern times, these practices offer an alternative to mainstream methods of self-discovery and self-mastery.

Author, intuitive consultant, solitary Witch, occult practitioner, and manifestation coach Diane Wing, M.A. discusses the practical aspects of magic and witchcraft, how it permeates society, and the ways that its practice and beliefs promote individual transformation and growth.

Prior to the meeting, those who can, are invited to attend the pre-General Membership Meeting Dinner at a secret location someplace in the heart of "the City with a Million Eat'ries" 's very own Chinatown or

Ol'City. This is an excellent opportunity to have a good meal and get to speak with the evening's guest, one on one. Contact Pete Stevens to reserve your place at dinner, by NOON on Friday.

Join us at the Police Administration Building, 750 Race Street, Philadelphia, PA. Please note: During the meeting, parking is allowed behind the building (despite the "Police Officers Only" notice) and IT IS FREE! This meeting is DVM's only activity specifically open to the public. Feel free to extend invitations to friends, neighbors, relatives, colleagues, jarheads, airheads, bubbleheads, and headbangers.

PS: Don't let traffic on the Schuylkill Expressway interfere with attending. Consider taking SEPTA and exiting at Market Street East / Gallery, it is only a two block walk to the Police Administration Building. Contact Contact Pete, 215-235-pete, for additional information.

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

Saturday October 9th, 2010 from 8am-5pm and October 16th 2010 from 10am to 6pm - UFO CONFERENCE - Pennsylvania leads the Nation in UFO Sightings: "UFO's... Seeing is Believing".

The Pennsylvania Mutual UFO Network will present its 3rd Annual UFO Conference's at the Sheraton Hotel 400 Oxford Valley Rd Langhorne Pa 19047 on Saturday October 9th, 2010 from 8am-and on Saturday October 16th 2010 from 10am to 6pm at the Westmoreland Community College, 145 Pavilion Ln, Youngwood, Pa 15697.

Pennsylvania has been the epicenter of the world's largest UFO wave since the summer of 2008. There have been over 650 UFO reports filed with MUFON from Pittsburgh to Philly over the past two years. John Ventre, the Pennsylvania State Director for MUFON stated, "We're getting clusters of sightings from every town from Pittsburgh to Philly along the southern half of the state. We have 151 reports in the Pittsburgh-Westmoreland County area and 355 in the Philly area. I get reports of UFO's coming in from Lake Erie in Ohio and across Wheeling, West Virginia into the Pittsburgh area and they are seen minutes later on the Eastern part of the state. The Conference will present a combination of expert Paranormal, Abduction and UFO speakers.

Speakers include Richard Dolan who has written numerous books on the government cover up, Bill Birnes of UFO Hunters, Budd Hopkins on Abductions, Kathleen Marden on Betty and Barney Hill, Peter Robbins who investigated the Rendlesham Forrest UK incident, John Ventre of the Mutual UFO Network, Stan Gordon will present Kecksburg then and Leslie Kean who sued NASA will present Kecksburg now on the 45th anniversary.

"The quality of speakers at this Conference rivals the larger pricier conferences that take place around the country", said Ventre. Professional presentations and vendor tables will highlight this conference in an academic setting. "We also have a few surprises for the audience and they are not Halloween tricks", said Ventre.

Admission price's are \$20 in Pittsburgh and \$30 in Philadelphia. Advance orders and the Conference Agenda can be obtained at John Ventre's website at www.johnventre.com or www.mufonpa.com. John Ventre can be reached at 724 836 1266 or at jventre1@comcast.net. The Mutual UFO Network was founded in 1969 after the US Air Force concluded their 17 year Project Blue Book study of UFO's and concluded that UFO's are not a threat to National Security. "They never said UFO's don't exist. There is overwhelming evidence that they do. I believe this is an aviation safety issue. The only reason there are not more collisions is because of their ability to maneuver, not ours", said Ventre. Mufon has 2700 members worldwide and over 900 certified investigators. The Pennsylvania MUFON branch has 129 members and 21 certified investigators. Anyone interested in joining MUFON can speak to John Ventre or one of the many investigators that will be at the conference from Pa, WV, NY, NJ and Ohio. "One

thing I know from conducting my investigations: if you've seen one, you believe", said Ventre.

Wednesday, October 13, 2010 at 7:30 PM - Rittenhouse Astronomical Society Monthly Meeting.

Join The Rittenhouse Astronomical Society on the second Wednesday of each month at 7:30PM in the Fels Planetarium. The society offers all persons an opportunity to participate in the activities of an astronomical group at the layman'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

Thursday, October 14, 2010 at 12:00PM - Tariq Ramadan | What I Believe - at the Free Library of Philadelphia

A leading scholar of Islam in the Western world, Tariq Ramadan is one of the most important innovators of the 21st century, according to Time magazine. He is a professor of Islamic Studies at Oxford University and author of several books including Radical Reform and In the Footsteps of the Prophet. Deemed a "Muslim Martin Luther" by Paul Donnelly of the Washington Post, Ramadan was barred from entering the United States for several years by the Bush administration. "Deliberately brief, sensible, and accessible," praises Publisher's Weekly. "What I Believe is not just a summary of Ramadan's own views but a primer on modern Western Muslim life." Tariq Ramadan will be interviewed by Carlin Romano, Critic-at-large, Chronicle of Higher Education. No tickets required. For Info: 215-567-4341

MCHUMOR.COM by T. McCracken



"I know it's the custom on your planet to not pay for parking up front, but that's not the custom here?"

Cartoon by T. McCracken
<http://www.mchumor.com/>
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October 19, 2010 06:00PM - 08:00PM at University of Pennsylvania Museum - Roberto Nardi, Centro di Conservazione Archeologica - Roma, will discuss The Roman city of Zeugma (Turkey) conservation project.

In May of 2000, the New York Times published a cry of alarm for the Roman city of Zeugma, in southeast Anatolia, Turkey. It was soon to be submerged by the waters of the Euphrates, because a new dam was being built downstream. The New York Times appeal was taken to heart by David Packard of the Packard Humanities Institute (PHI) of California, who immediately organized an action plan based on a "targeted" archaeological investigation and on conservation in situ.

Under extreme climatic conditions, the conservators worked on site for six months before the Euphrates waters, reaching their maximum level, defined the new panorama of Zeugma, which is now a national archaeological park.

4000 finds and 160 m2 of surfaces were removed from the site, 8700 m2 of archeological structures were reburied using 10,500 m3 of sand, pebbles and stones. The program also included the restoration of almost 850 m2 of figurate polychrome mosaics which represent today one of the most extraordinary mosaics collections on display. More: www.ccaroma.org Admission: Pay-what-you-want

SOCRATES CAFE is moderated by: Lewis Mifsud, Ph.D., P.E., a member of PhACT and of The American Academy of Forensic Sciences. At the Springfield Township Public Library (215-836-5300) at 1600 Papermill Mill Road, Wyndmoor, PA. 19038. This philosophical discussions group is free and open to the public. Join us and share your critical thinking, questions and opinions.



Saturday, October 23, 2010 - 10:00 AM to 12:15 PM - The Importance For the U.S. of Haiti's Past, Present, and Future. John Vincent, retired U.S. diplomat who served at the U.S. embassy in Port-au-Prince, Haiti, in the mid-1970s.

Haiti, born as a slave colony, seized its independence in a bitterly fought revolution whose success prompted France to sell the Louisiana Territory to the U.S. Yet the U.S. rejected independent Haiti until 1862 and backed France's imposition on it of a huge indemnity, causing a crippling indebtedness not fully paid until 1947. Occupied by the U.S. from 1915 until 1934, Haiti's relations with the U.S. have often been troubled yet somehow the two countries must manage to cooperate to reconstitute Haiti's failed governance and earthquake-shattered economy if ever Haiti is to become able to provide for itself.

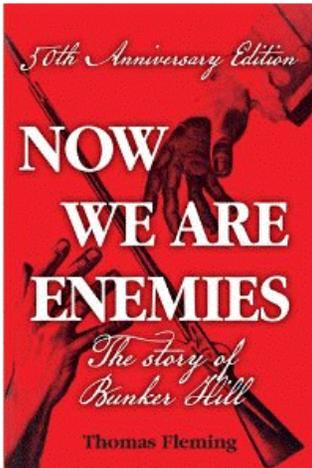
This event is free. At the Henry George School of Social Science, 413 S. 10th Street, Philadelphia. 215-922-4278

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

Saturday, October 23, 2010 at 7:00 PM. Opera Jeopardy! A robust evening of fun for audience and singers combined. There will be lots of music as well as a lot of audience participation. If you have a question pertaining to opera that you would like to submit, please send it to Tim Oliver at Ttimoliver@aol.com. Tickets are \$40 and dinner is included. Reservations are a must. At Keenan's Valley View Inn, 468 Domino Lane, in the Roxborough section of Philadelphia. For Information: Phone: 215-725-4171 - Email: info@dvopera.org

Tuesday, October 26, 2010 - 6:00 to 8:00 PM - Wellness Education Forum - "Evolving Genomes: Human Origins and Our Microbial Passengers" at the Franklin Theater in the Franklin Institute. Free, but Seating is Limited - Call for reservations: 215.448.1254 Lecture and Q&A discussion on human and microbial diversity and how variation in genetic material reflects our history and shapes our health. Presented in partnership with the Penn Genome Frontiers Institute.

Wednesday October 27, 2010 at 7:30 P.M. The American Revolution Round Table of Philadelphia. Tom Fleming on the release of his 50th Anniversary edition of Now We are Enemies, his book on the Battle of Bunker Hill.



At Broad Axe Tavern, 901 West Butler Pike, Ambler, PA 19002 Telephone: (215) 643-6300 This event is free and open to the public.

www.arrtop.com

Thursday, October 28, 2010 at 7:30PM - Joseph J. Ellis | First Family: Abigail and John Adams - Central Library 1901 Vine Street, 19103 -

Joseph J. Ellis is a bestselling author and distinguished chronicler of early American history. His book, *American Sphinx: The Character of Thomas Jefferson*, won the 1997 National Book Award, and in 2001 Ellis earned the Pulitzer Prize for History for his illuminating study of the intertwined lives of the founders of the American Republic,

Founding Brothers: The Revolutionary Generation. A depiction of the Adams marriage that is part biography, part love story, and part political history, Ellis's new book, *First Family*, follows John and Abigail from before the Revolution through to John Adams's election to the presidency.

Cost: \$15 General Admission, \$7 Students. Buy tickets online | Ticket and Subscription Packages **215-686-5322**

A Pine Tree Foundation Endowed Lecture

Saturday, October 30, 2010 - 02:00PM - At University of Pennsylvania Museum. Pompeii 79 CE: The Treasure of Rediscovery

During the course of two days in August, 79 CE, the thriving Roman cities of Pompeii and Herculaneum were buried by thick layers of ash and mud when the volcanic Mt. Vesuvius erupted, capturing one moment in the cities' history. The cities lay buried for nearly 1,700 years, until excavations sponsored by the Kings of Naples gradually brought them to light once more, and with them a wealth of bronze and marble statues that attracted travelers on the Grand Tour.

Dr. C. Brian Rose, Penn Museum Deputy Director and Curator-in-Charge of the Mediterranean Section, provides an overview of what Pompeii was like 2,000 years ago, and considers the colorful lives of its 18th century excavators. Join us afterwards for an afternoon tea and dim-sum reception to celebrate the upcoming exhibition *Secrets of the Silk Road*, opening Saturday, February 5, 2011.

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

Tuesday, November 2, 2010 at 7:30PM - Simon Winchester | Atlantic: Great Sea Battles, Heroic Discoveries, Titanic Storms, and a Vast Ocean of a Million Stories with Ian Frazier | Travels in Siberia - at the Free Library of Philadelphia

Simon Winchester explores topics from the urbane to the catastrophic in his New York Times bestselling nonfiction books, which include *The Professor and the Madman*, *Krakatoa*, and *The Man Who Loved China*. His writing also appears in *National Geographic* and *Smithsonian* magazine. From the Purple Islands off the coast of Morocco to the tip of Antarctica, Winchester's new book *Atlantic* takes readers on an armchair expedition across the breadth and depth of the Atlantic Ocean, documenting its dynamic history along the way.

Recipient of the James Thurber Prize for American Humor, Ian Frazier is a frequent contributor to *The New Yorker*, and the author of *Great Plains*, *On the Rez*, *Dating Your Mom*, and *Lamentations of the Father*, a collection of essays. Brimming with fur seekers, tea caravans, and exiles of every kind, *Travels in Siberia* is part travelogue, part history, and part personal reflection on the grim and much storied region of Russia—in Frazier's hands, humor is still to be found along the way.

Cost: \$10 General Admission, \$7 Students. For Info: 215-567-4341

Thursday, November 4, 2010 - 4:00 - 7:00 PM

Lecture at 5:30 PM at The Wagner Free Institute of Science

Looking into the Future: Global Climate Change and Ecosystems An Illustrated Presentation by Dr. Clint Springer, Saint Joseph's University

Site of the world's first experiment examining the response of ecosystems to elevated CO₂, Duke Forest, Chapel Hill, NC

Human activities, such as fossil fuel use and changes in the way land is utilized, are causing unprecedented changes in Earth's climate. These changes are having - and will have in the future - significant effects on nearly every aspect of ecosystems, including plants, microbes, insects, animals and humans. This talk will examine the causes of climate change and summarize our current understanding of the impacts of these changes.

Dr. Clint Springer is Assistant Professor of Biology at Saint Joseph's University. He fell in love with all things natural as a boy in the mountains of West Virginia. He later received a B.A. in biology and a Ph.D. in environmental plant biology from West Virginia University. His research is focused on the responses of plants to global climate change and, through his involvement in a number of research projects, he is working to train the next generation of both professional and citizen scientists.

Saturday, November 6, 2010 - P.I.R.A (Paranormal Investigators and Research Association) will participate in a one night fund raising event for Fort Mifflin, a historic Revolutionary War site in Philadelphia. All proceeds collected from this event will go directly to Fort Mifflin. For more information, please contact Fort Mifflin by calling 215-685-4167 ask for Lorraine Irby, or you can email her at irby.lorraine@gmail.com



Buildings at Fort Mifflin

Tuesday, November 9, 2010 at 7:30PM - Stacy Schiff | Cleopatra: A Life at Free Library of Philadelphia, 1901 Vine Street, 19103.

Though she did not live to see 40, Cleopatra accomplished much during her reign as Egypt's last queen. Ruthless and shrewd, she waged wars, poisoned her enemies, and fell in love with Mark Antony, forging an alliance with him that ultimately led to her downfall. Untangling fact from fiction, acclaimed biographer Stacy Schiff weaves the story of the wealthiest and most influential woman of her time. "One of the most gifted storytellers writing today," according to historian Joseph J. Ellis, Schiff is author of the Pulitzer Prize winner *Véra* (Mrs. Vladimir Nabokov) and the Pulitzer Prize finalist *Saint-Exupéry*.
Cost: FREE No tickets required. For Info: 215-567-4341

Wednesday, November 9, 2010 at 7:30 PM - Rittenhouse Astronomical Society Monthly Meeting.

Join The Rittenhouse Astronomical Society on the second Wednesday of each month at 7:30PM in the Fels Planetarium. The society offers all persons an opportunity to participate in the activities of an astronomical group at the layman'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

Friday, November 12, 2010 at 8:00 PM Mensa General Membership Meeting is usually on the 2nd Friday of each month at the Police Administration Building at 750 Race Street in Philadelphia. Contact Pete Stevens at pete.stevens@phila.gov for more information or the Mensa calendar at <http://dvm.us.mensa.org>

Tuesday, November 16 2010 at 06:00PM at University of Pennsylvania Museum.

Evening Lecture and Book-signing. Fakes and Forgeries with Robert Wittman

Long an undercover FBI agent and founder of the FBI's Art Crime Team, Robert Wittman, author of The New York Times Best Seller *Priceless: How I Went Undercover to Rescue the World's Stolen Treasures* is undercover no more--but he remains active, and passionate, about the world's art and cultural heritage. In this new talk, Mr. Wittman, now head of Robert Wittman, Inc., an art security and recovery consulting firm, looks at some of the great fakes and forgeries of recent years, including the recent, much-publicized "Antiques Roadshow" fraud caper, and offers insight into how museums and others can be on the alert for questionable "treasures."

Lecture admission: pay-what-you-want.

Priceless available for purchase. Book Signing follows talk.

Wednesday, November 17, 2010 at 7:30 P.M. The American Revolution Round Table of Philadelphia. Tom Keels on the Mischianza held in Philadelphia in 1778. Discussing his new book **Wicked Philadelphia: Sin in the City of Brotherly Love.** At Broad Axe Tavern, 901 West Butler Pike, Ambler, PA 19002 Telephone: (215) 643-6300 Free and open to the public. www.arrtop.com

Tuesday, November 30, 2010 at 7:30PM - Central Library Eric Foner | The Fiery Trial: Abraham Lincoln and American Slavery Free Library of Philadelphia, 1901 Vine Street, 19103

The DeWitt Clinton Professor of History at Columbia University, Eric Foner is a noted scholar of the Civil War and Reconstruction period of U.S. history. He is the author of several books including *The Story of American Freedom*, *Who Owns History?*, and *Reconstruction: America's Unfinished Revolution*, which received the Bancroft, Parkman, and Los Angeles Times Book prizes. *The Fiery Trial* tells the story of Abraham Lincoln and how he deftly navigated a divided nation to abolish slavery and usher in a new era of American politics.

Cost: \$10 General Admission, \$7 Students

Wednesday, December 8, 2010 at 7:30 PM - Rittenhouse Astronomical Society Monthly Meeting.

Join The Rittenhouse Astronomical Society on the second Wednesday of each month at 7:30PM in the Fels Planetarium. The society offers all persons an opportunity to participate in the activities of an astronomical group at the layman'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

Friday, December 10, 2010 at 8:00 PM Mensa General Membership Meeting is usually on the 2nd Friday of each month at the Police Administration Building at 750 Race Street in Philadelphia. Contact Pete Stevens at pete.stevens@phila.gov for more information or the Mensa calendar at <http://dvm.us.mensa.org>

MCHUMOR.com by T. McCracken



"Damn. Every time they change to and from Daylight Saving Time on Earth, it effects the space time continuum."

Cartoon by T. McCracken
<http://www.mchumor.com/>
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Science on Tap, A Science Café

Science on Tap is a monthly gathering in Philadelphia for anyone

who is interested in getting together with other people to discuss a range of engaging science topics.

Held at National Mechanics, a relaxed, convivial bar in Old City, *Science on Tap* features a brief, informal presentation by a scientist or other expert followed by lively conversation.

The goal is to promote enthusiasm for science in a fun, spirited, and accessible way, while also meeting new people. Please come join the conversation! On the **second Monday of each month at 6:00 PM.**

What's On Tap

Monday October 11, 2010

This month James Fleming, professor of science, technology and society at Colby College, will present “A Toast to Fixing the Sky.”

Fleming will examine solutions to aerial problems, including global warming, from a historical perspective. This tragicomic history is filled with scientists, soldiers, and salesmen, weaving together stories from elite science, cutting-edge technology, and popular culture.

We will toast some Rube Goldberg inventions and discuss technological fixes in general.

This month's Science on Tap is presented by the Chemical Heritage Foundation.

National Mechanics 22 South Third St. Philadelphia PA
19106
215-701-4883

Free and Open to the public (age 21+) or minors accompanied by a chaperone 25+. Want to join the Science on Tap mailing list? Contact us at scienceontaphilly@gmail.com and include "subscribe to mailing list" as the subject line

Science for what ales you

The science café movement began in Leeds, England in 1998 when a local pub decided to foment a new kind of bar-room brawl—a scientific debate. The idea took off as a unique way to advance public understanding of science. Now, there are locations from Maine to California where, for the price of a beer or a glass of wine or a cup of coffee, anyone can discuss scientific ideas with leading experts in their fields and learn about developments that are changing our lives.



Penn
UNIVERSITY OF PENNSYLVANIA

Penn

2009-10

Science Café Schedule

The Penn Science Café, the lecture series that hauls science out of the lab and treats it to a night on the town. Free and open to the public, it's an opportunity to pitch questions to leading scientific experts.

7:00 P.M. @ the MarBar, 40th and Walnut street location, 2nd floor of the Marathon Grill, menu items available for purchase RSVP to Jordan Reese, jreese@upenn.edu or 215-573-6604.

Oct 20 Nature's Nanotechnology: Biomolecules Explored One at a Time Yale Goldman, Associate Director of the Nano/Bio Interface Center

Nov 17 Gravitational Lensing: Einstein Rings and Dark Matter.

Bhuvnesh Jain, Professor of Physics and Astronomy

Dec 15 Mathematics: Created or Discovered? Robert Ghrist, Andrea Mitchell University Professor of Math & Electrical Systems and Engineering

Jan 25, 2011 The World Water Crisis Stan Laskowski, President of the Philadelphia Global Water Initiative

Feb 16 Why You Can Hardly Swing A Dead Cat Without Hitting A Dead Cat In an Animal Shelter Today. The Obvious, the Occult, and the Counterintuitive World of Animal Sheltering Michael Moyer, VMD, Rosenthal Director of Shelter Animal Medicine

March 16 Stealing the Past: Collectors and Museums of the 21st Century Richard Leventhal, Curator, Penn Museum

April 20 From Barbershops to Basketball Courts: Culturally Relevant Interventions in the African American Community Howard Stevenson, Associate Professor of Applied Psychology, Graduate School of Education

May 18 Neuroeconomics: Decision Making and the Brain Joe Kable, Associate Professor of Psychology



1700 West Montgomery Avenue
, Philadelphia, PA 19121

ph 215-763-6529 www.wagnerfreeinstitute.org

Adult Education - Fall 2010 Courses

Wagner courses are free but contributions are greatly appreciated

► **The Scientist as an Explorer: Makings of adventures, heroes, and scientific knowledge**, Professor Sylwester Ratowt. 8 Wednesdays, September 29 through November 17, 2010, 6:30 to 7:45 PM. Independence Branch of the Free Library, 18 S. 7th Street (between Market and Chestnut). This course will examine the contexts in which travels were turned into scientific knowledge and travelers were turned into heroes. No preregistration required.

► **An Introduction to Insects and Related Arthropods**, Professor Robert T. Allen. 8 Thursdays, September 30 through November 18, 2010, from 6:30 to 8:00 PM. The Academy of Natural Sciences, 19th Street and the Benjamin Franklin Parkway. This class will explore the diversity of insects, examining the features that have made them the most successful group of organisms on earth.

This course requires preregistration and is limited to 15 students. To preregister, call 215-763-6529, ext. 23, beginning Wednesday, September 15, 2010.

► **Forensic Anthropology**, Professor Janet Monge. 6 Mondays, October 4 through November 8, 2010, from 6:30 to 8:00 PM. University of Pennsylvania Museum of Archaeology and Anthropology, 33rd and Spruce Streets. This course will discuss the skills used by forensic anthropologists and how they are applied to forensic cases. There will be a field trip to a local cemetery on a Saturday. No preregistration required.

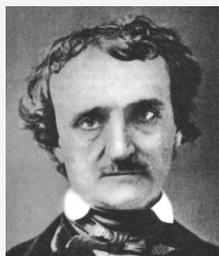
► **Physics and Chemistry in the Kitchen**, Professor Paul J. Angiolillo. 8 Tuesdays, October 5 to November 23, 2010, from 6:00 to 7:30 PM. Wynnefield Branch of the Free Library, 5325 Overbrook Avenue. This course, designed for "geek foodies," will explore the scientific foundations of cooking and cooking practice. No preregistration required.

Thursday, October 14, 2010 - 4:00 - 7:00 PM

Lecture at 5:30 PM

Weeknights at the Wagner: The Experiments of Edgar Allen Poe
An Illustrated Presentation By
Dr. John Tresch, University of Pennsylvania

Edgar Allen Poe is usually thought of as a fantasist, more at home in the realm of imagination than the world of fact and reason. Yet many of his tales of mystery and the grotesque show the impact of the scientific and technological discoveries of his day.



This talk will reveal a lesser-known side of Poe. Before he began writing, Poe received some of the best scientific training available at the time as a cadet at West Point. He also worked as an early science journalist, reporting and evaluating new discoveries and inventions to readers curious about the universe and hungry for novelty.

Poe took special pleasure in debunking scientific hoaxes, such as the

Chess-playing Turk, and even more in inventing his own. Poe's writings share his age's enthusiasm for natural history and the classification of specimens (gold bugs and others); for electricity, magnetism and mesmerism; and for theories about the origin and destiny of the solar system. The obsession of many of his best-loved tales is nothing other than an exploration of the power and the limits of calculation and reason.



Poe invented and contributed to new, scientifically-influenced literary genres - the detective story and science fiction. This talk will consider the literary experiments of this singular author, in both familiar and lesser-known works, as a reflection - and critique - of a society being transformed by science and industry.

John Tresch is Assistant Professor in History and Sociology of Science at the University of Pennsylvania. He is the author of *The Romantic Machine: Technology and Metamorphosis in Paris*, 1821-1851 and is currently working on a book on Poe and American Science.

Saturday, October 23, 2010 - 12:00 - 4:00 PM

Bloodsuckers: A Spooky Creature Feature



Bat. Photo by Tim Flach.

A Halloween Family Open House featuring a presentation with live animals from the Elmwood Park Zoo
Presentation at 1:00 PM
Come in Costume!

The presentation will be American Sign Language interpreted.

From your dog's fleas, to pesky mosquitoes, to sneaky bedbugs, bloodsucking creatures are a part of our lives. But there are many myths that surround these strange and sometimes gross animals. At this spooky time of year when we think of vampires and other monsters, we find ourselves considering many questions - are bloodsucking animals cool or creepy? Do all bats drink blood? Is blood even good for you?

Come, if you dare, to find the answers to these juicy questions when the Elmwood Park Zoo pays a visit to the Wagner with some of their more unusual animals, including bats, vultures, and more. This interactive program for children ages 6-12 will also feature (appetite permitting) a live leech feeding with the newest additions to the Wagner's teaching collection, Edward, Alice and Carlisle.

Join us to learn about what these misunderstood creatures eat and why, explore the bloodsucking animals in the Wagner's museum, and make Halloween decorations to take home.

12 - 4 PM

- Institute is open to the public.
- Explore the museum collections in the exhibition hall.
- Hands-on activities for children ages 6-12.

1 - 2 PM

- Children's program in the Victorian lecture hall.

2 PM

- Leech feeding with Edward, Alice and Carlisle (appetite permitting).

Visitors are encouraged to come in costume. The museum may be viewed without attending the presentation. Wagner educators will lead scavenger hunts and hands-on activities for children in the museum.

Wagner courses and events are free. Tax deductible contributions are greatly appreciated.

The Academy of Natural Sciences Center for Environmental Policy "Philadelphia's Window on the Environment"

Center for Environmental Policy
The Academy of Natural Sciences
1900 Benjamin Franklin Parkway, Philadelphia, PA 19103
www.ansp.org/environmental/
215-299-1108 cep@ansp.org

Upcoming Public Events

Thursday, October 14, 6–8:30 pm

From Trash to Treasure: Finding Value in Philadelphia's Waste Stream

6 pm: Reception, 6:30–8:30 pm: Program

Philadelphians generate about 700,000 tons of trash each year, but an audit of the city's recycling program suggested the City of Philadelphia could save as much as \$17 million a year through recycling. Come to the October Urban Sustainability Forum and learn how Philadelphia's efforts to increase recycling and reduce waste save precious tax dollars, about the value found in discarded construction and demolition waste, and how RecycleBank created a successful model for rewarding people to recycle.

Panel:

- David Biddle: Recycling Coordinator, City of Philadelphia;
- Carla Castillo and David Kinsey: RecycleBank;
- Avi Golen: Revolution Recovery.

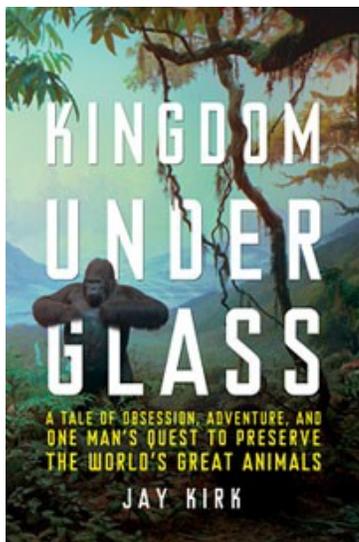
RSVP at phillywastetreasures.eventbrite.com/

Wednesday, October 27, 2010, 6:30-7:30 pm

An Evening with Author Jay Kirk

Book signing to follow

Spend an evening with author and Philadelphia resident Jay Kirk as he discusses his newest book, *Kingdom Under Glass: A Tale of Obsession, Adventure, and One Man's Quest to Preserve The World's Great Animals*.



Kingdom Under Glass: A Tale of Obsession, Adventure, and One Man's Quest to Preserve The World's Great Animals.

In this epic account of an extraordinary life lived during remarkable times, Kirk follows the adventures of the brooding genius Carl Akeley who revolutionized taxidermy in the late 19th century. Akeley's artistic methods were used in natural history dioramas across the country, including the Academy of Natural Sciences.

Kirk's nonfiction has

been published in Harper's, GQ, The New York Times Magazine, and The Nation. His work has been anthologized in Best American Crime Writing 2003 and 2004, and Best American Travel Writing 2009 (edited by Simon Winchester). He is a recipient of a 2005 Pew Fellowship in the Arts and is a MacDowell Fellow. He teaches in the Creative Writing Program at the University of Pennsylvania.

Starting at 5:30 pm, visitors are invited to view rarely seen specimens and hear the stories behind the Academy's own dioramas. See photos and field sketches from the pioneering Academy explorers who followed in Akeley's footsteps.

Please RSVP to 215-299-1060 or reservations@ansp.org

Wednesday, November 3, 2010 - 6:00–8:30 pm

Alaska Wild!

The Arctic National Wildlife Refuge is home to a vast array of birds, grizzly bears, musk oxen, caribou, and much more. Join Alaska Wilderness League to celebrate the 50th



anniversary of the Arctic National Wildlife Refuge. Learn about the critical issues that are facing Alaska's public lands, these unique species and the native Gwich'in people. Gain insight into the many ways the Alaska Wilderness League and other advocates bring attention to issues in order to affect Congress and federal agencies that shape policies.

The class will be led by Monica Scherer, the Pennsylvania Field Organizer for the Alaska Wilderness League.

Fee: \$15 members/ \$20 non-members

Space is limited to 25 participants. Call 215-299-1060 to register.

Thursday, November 14, 2010 - 6:30-7:30 pm

An Evening with Wildlife Conservationist Jim Fowler

Jim Fowler, notable wildlife conservationist and former host of Mutual of Omaha Wild Kingdom, will share his life work on saving endangered species and preserving threatened wildlife habitat.

This program is free and open to the public. Please register at jimfowlerwildlife.eventbrite.com.

This program is co-produced by the **Philadelphia Chapter of the Explorers Club** and the Academy's **Center for Environmental Policy**.

Laurel Hill Cemetery

3822 Ridge Avenue - Philadelphia, PA 19132.
215-228-8200 <http://www.thelaurehillcemetery.org>



Hours of Operation:

Monday-Friday 8:00am-4:30pm

Saturday-Sunday 9:30am-4:30pm

Closed Major Holidays

Admission to Laurel Hill Cemetery is always free

Saturday, October 9, 2010, at 5:00pm 2nd Annual Rest in Peace 5K Run

Trick or treat...move your feet! The 2nd Annual Rest In Peace 5K is a unique and challenging run through the grounds of Laurel Hill Cemetery, a National Historic Landmark site located in the East Falls neighborhood of Philadelphia. With over 78 acres of grand architecture, stunning statuary, rolling landscapes, and majestic views of the Schuylkill River, Laurel Hill provides an appropriately cool albeit creepy course for runners – or walkers – of all ages and fitness levels. Participants and spectators alike are encouraged to attend in Halloween attire. Following the run, join us for our after-party at the Marketplace at East Falls, where prizes will be given for the best costumes as well as to the winners of the run!

Organized by East Falls Fitness, the Rest In Peace 5K is a charity run benefitting the diverse communities served by Gearing Up and the Friends of Laurel Hill Cemetery, two nonprofit groups working to enhance lives and further opportunities within the Philadelphia region.



Saturday, October 9, 2010 at 10:00-12:00 - Woof, Wag n' Walk



West Laurel Hill Cemetery's annual Woof, Wag n' Walk will benefit Main Line Animal Rescue and Montgomery County SPCA. People and pooches alike are invited to enjoy a mile-long guided tour of our magnificent grounds where you'll visit the burial places of some of our most famous residents. Join us after the walk for a raffle and free doggie goodie bags.

The tour will depart from the Conservatory on the grounds of West Laurel Hill Cemetery, 215 Belmont Avenue, Bala Cynwyd. Donations support Main Line Animal Rescue and Montgomery County SPCA. Special thanks to Braxton's Animal Works for their continued generous support!

Sunday, October 24, 2010 at 1:00pm FALL FAMILY DAY

Spend an autumn afternoon exploring the many mysteries of Laurel Hill Cemetery while celebrating Halloween! Fall Family Day will thrill and chill both young and old with behind-the-scenes tours of the site. The Cemetery's prime location overlooking the Schuylkill River will offer visitors majestic views of the colorful fall foliage and vibrant landscape along Kelly Drive.

Activities will include apple bobbing, scavenger hunts, arts and crafts, storytelling, and Halloween games. Feast on an assortment of hotdogs, popcorn, cookies, hot apple cider and other spooky treats.

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

Cost is \$20 for families up to four; \$5 for each additional person

Recommended for children ages 4-12. Advance reservations are appreciated. Call (215) 228-8200.



Thursday, October 28, 2010. Seatings at 5:30pm, 7:00pm, and 8:30pm -

DINING WITH THE DEAD: BYOB DINNERS and HALLOWEEN TOURS

Join us for a ghoulish dining experience... This package will include a buffet-style, catered, candlelit dinner and dessert inside Laurel Hill's historic Gatehouse, followed by a flashlight walking tour through the National Historic Landmark Cemetery. Along the way, you'll meet some of our most restless spirits, as portrayed by talented local actors. Bring your own beer, wine and flashlights! \$50/person (this event is restricted to those ages 21 and older) Reservations must be made in advance. Space is limited. Call (215) 228-8200 for payments via cash, Visa, MasterCard, Discover. Checks made payable to the Friends of Laurel Hill Cemetery can be mailed to 3822 Ridge Avenue, Philadelphia, PA 19132





The College of Physicians of Philadelphia
BIRTHPLACE OF AMERICAN MEDICINESM

College of Physicians of Philadelphia
19 South Twenty-Second Street
Philadelphia, PA 19103
(215) 563-3737 x304

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

College of Physician lectures and programs are free. There may be a fee at some receptions.

Tuesday, October 12, 2010 at 10:30AM

The Many Faces of Health Care Reform: Consumers (Older Adults)

Speakers: Ray Landis, AARP; Joanne Grossi, Deputy Health Director of PA Department of Health

Co-sponsored with PA AARP and Delaware Valley Health Council

Monday, October 18, 2010 at 6:30PM

DISSECTION: Photographs of a Rite of Passage in American Medicine 1880 – 1930

Featuring 138 rare, historic photographs, Dissection is a "landmark book" (Ruth Richardson) that reveals a startling piece of American history, the rite of passage into the mysteries of medicine captured in photography.

From the advent of photography in the 19th century and into the 20th century, medical students, often in secrecy, took photographs of themselves with the cadavers that they dissected: their first patients.

The photographs were made in a variety of forms, from proud class portraits to staged dark-humor scenes, from personal documentation to images reproduced on postcards sent in the mail. Poignant, strange, disturbing, and humorous, they are all compelling.

These photographs were made at a time when Victorian societal taboos against intimate knowledge of the human body were uneasily set aside for medical students in pursuit of knowledge that could be gained only in the dissecting room. Dissection, writes Mary Roach, "documents—in archival photographs and informed, approachable prose—a heretofore almost entirely unknown genre, the dissection photograph."

Speakers: John Harley Warner and James M. Edmonson

Co-sponsored by the College's Sections on Medicine and the Arts and Medical History.

Tuesday, October 19, 2010 at 6PM

16th Annual Thomas Langfitt, Jr. Memorial Symposium on Health Care Policy: Accountable Care Organizations

Panelists:

- ◆ Troyen A. Brennan, MD, MPH, Head of CVS Minute Clinic
- ◆ Michael J. Dandorph, UPHS Senior Vice President for Business Development
- ◆ Samuel R. Nussbaum, MD, CMO of Wellpoint

Moderator: Mark V. Pauly, PhD, The Wharton School of the University of Pennsylvania; Bendheim Professor; Professor of Health Care Management; Professor of Business and Public Policy; Professor of Insurance and Risk Management; Professor of Economics

Co-sponsored with the University of Pennsylvania.

Saturday, October 30, 2010 All Day

The Mütter Museum's 3rd Annual Day of the Dead Festival. Come celebrate this traditional Mexican holiday with an all-day event at the Mütter Museum! Decorate sugar skulls, enjoy traditional food and drink, visit the Museum, hear from guest speaker, artist Joanna Ebenstein and see an exclusive show by local personality Grover Silcox!

10AM: Museum opens and sugar skull decorating begins

12PM and 4PM: Talk by Artist Joanna Ebenstein

5 - 6:30PM: Guided museum tour, exclusively for Friends of the Mütter -

6:30 and 8PM: Exclusive performance by Grover Silcox

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

(NOTE: Registration is not required for daytime festivities and is free with Museum admission; registration IS required, with additional cost for admission, to Silcox production.)

Wednesday, November 3, 2010 at 6:30 PM

The Radbill Lecture: Four Centuries of Vaccinology

Renowned vaccinologist Stanley A. Plotkin, MD, creator of the rubella vaccine used throughout most of the world, will trace the serendipitous beginnings of vaccinology in the 1700s to its flowering in the latter half of the 20th century. Dr. Plotkin, who was an instrumental figure in the development of polio, rabies, varicella, rotavirus, and cytomegalovirus vaccines, will highlight the relationship of vaccinology to industrial and technological developments, as well as the special role of Philadelphia institutions and researchers in vaccine development. The event will mark the launch of the History of Vaccines, an online project of The College of Physicians of Philadelphia, viewable at www.historyofvaccines.org.

Dr. Plotkin is Emeritus Professor of the University of Pennsylvania and the Wistar Institute. His many professional awards include the Sabin Gold Medal Award; the French Legion of Honor Medal, and the Maxwell Finland Award for Scientific Achievement.

Sponsored by the College's Section on Medical History.

The Mutter Museum
19 South 22nd Street
Philadelphia, PA, 19103

Hours of operation: Monday-Friday, 10am-5pm

Saturday & Sunday, 10am-5pm

Closed on Thanksgiving Day, December 25th, and January 1st.

General Admission (Ages 18-64): \$14

Children (Ages 6-17): \$10

Senior Citizens (Age 65+): \$10

Students with valid ID: \$10

Military with valid ID: \$10

Fellows of the College: FREE

Children under 6: FREE

The Mütter Museum was founded to educate future doctors about anatomy and human medical anomalies. Today, it serves as a valuable resource for educating and enlightening the public about our medical past and telling important stories about what it means to be human. The Mütter Museum embodies The College of Physicians of Philadelphia's mission to advance the cause of health, and uphold the ideals and heritage of medicine.

**Events and exhibits at
Chemical Heritage Foundation
315 Chestnut Street - Philadelphia, PA 19106
Tel: 215-925-2222 • Fax: 215-925-1954
<http://www.chemheritage.org>**

Events and exhibitions are free and open to the public unless otherwise noted.

Tuesday, October 12, 2010 - noon to 1:00 PM

Brown Bag Lecture: "Fixing the Sky: Historical Perspectives on Weather and Climate Control"

A talk by James Rodger Fleming

This presentation examines the tragicomic history of rainmakers, weather warriors, and climate engineers, arguing that history matters in pressing issues of current public-policy concern and technical decision-making.

James Rodger Fleming is a historian of science and technology and professor of science, technology, and society at Colby College. Fleming recently held the Charles A. Lindbergh Chair in Aerospace History at the Smithsonian Institution, the Roger Revelle Fellowship in Global Stewardship from the American Association for the Advancement of Science, and a public-policy scholarship at the Woodrow Wilson International Center for Scholars. In the spring of 2011 he will convene a Gordon Cain research conference on the history of atmospheric chemistry at CHF.

For more information, please call 215.873.8289, or e-mail bbl@chemheritage.org.

Wednesday, October 13, 2010 at 6:30 PM

The Secret Cinema at CHF: *Things to Come*

Announcing the third installment of screenings curated by Jay Schwartz of The Secret Cinema in conjunction with CHF's latest exhibit, *Marvels and Ciphers*. Each screening mixes vintage educational films about science with classic science-fiction features.

Immediately following this screening, Temple University English professor Oliver Gaycken will lead a discussion on the film's depictions of scientific debate and discovery.

Popcorn and other refreshments will be served.

About the feature: *Things to Come* (1936, Dir: William Cameron Menzies). H. G. Wells' *Things To Come* has been described as one of the most important science-fiction films of all time.

About The Secret Cinema: Founded by Jay Schwartz in 1992, The Secret Cinema is a "floating repertory film series" that strives to expose classic and difficult-to-see film fare in alternative settings and to keep the repertory film experience alive by always projecting real celluloid.



Tuesday, October 19, 2010— noon to 1:00 PM

Brown Bag Lecture: "Crafting the Two Cultures: Identifying and Educating Future Scientists and Non-Scientists in America, 1910–1970"

A talk by Rebecca B. Miller

The professionalization of science in the late 19th century introduced the enduring conception of "scientists" and "non-scientists" as distinct types of people with different educational needs. In subsequent decades, educators engaged in a systematic quest to codify, normalize, and apply ideas about the unique characteristics of each group and how each was expected to make use of scientific knowledge.

This presentation examines how 20th-century U.S. educators constructed and effectuated the notions of "future scientist" and "non-scientist" as entities distinct in makeup, educability, and civic responsibility. It will analyze how these distinctions took shape through the science curriculum, psychological testing and assessment of scientific identities and aptitudes, guidance and vocational counseling, and research on science curriculum and pedagogy. It will further consider how the articulation and enactment of educational differentiation in science both shaped and responded to changing views of the nature of the scientific enterprise and its place in society.

Rebecca B. Miller is a doctoral candidate at the Harvard Graduate School of Education. Her research focuses on the role of education in mediating the relationship between science and society. Prior to her graduate studies, Miller conducted research on intracellular transport at Princeton University and Memorial Sloan-Kettering Cancer Center, worked as a freelance science writer, and developed online courses in science and medicine for Columbia University.

Tuesday, October 26, 2010 - noon to 1:00 PM

Brown Bag Lecture: "Humphry Davy's Last Days: The Chemist as a Philosopher and a 'Dreamer of Dreams'"

A talk by Vangelis Koutalis

The last printed work of Humphry Davy, entitled *Consolations in Travel or the Last Days of a Philosopher* (London: John Murray, 1830), was written not long before its author's death. In the book the famous British chemist sets a series of dialogues, asking questions about the history of civilization, the history of creation, the possibility of science itself, and the very possibility of things. It is evidently a philosophical discourse, but not of an arbitrarily speculative kind, since it incorporates detailed scientific descriptions and is based on then-current theories, covering a broad range of disciplines.

Daydreaming plays a significant role in the deployment of the narrative. The book begins with a vision, a reverie of Philaethes, a persona that functions as one guise for Davy himself. Then another persona comes into play, named "The Unknown," who stands, as we can plausibly assume, for the ideal Ego of Davy: the chemical philosopher who far from being confined in the apothecary shop or the "kitchen," where useful applications are to be prepared, contemplates nature, reckons nature in terms of becoming, indulges in astonishment, and feels pleasure "in contemplating the order and harmony of the arrangements belonging to the terrestrial system of things" (p. 243). Some decades after Lavoisier had chased the metaphysicians out of the domain of chemistry, the ideal Ego of Davy keeps claiming the subjective position of a philosopher, keeps endorsing via contemplativa, revealing thus an unexpected—from our standpoint—affinity with the theosophist-chymists of the Renaissance. Instead of being just a token of Romantic literary inclinations or an outcome indicative of Davy's retirement from the strenuous daily round of an active chemist, his *Consolations* illustrate a kind of consciousness, pertaining to reveries and also essential in scientific inquiry (lest this inquiry be negated), that Ernst Bloch has designated as "anticipatory": the chemist, studying "those operations by which the intimate nature of bodies is changed" (p. 247), advances, as is the case with all waking dreams, into a world to come, a field of real possibilities for a better life. Davy's last book is not the farewell of a specialist, of an experienced puzzle-solver, but the testimony of a traveler, of a Homo Viator, remaining in a state of hope, striving to keep his nearness to "that evening star of light in the horizon of life, which, we are sure, is to become in another season a morning star, and it throws its radiance through the gloom and shadow of death" (p. 222).

Vangelis Koutalis is a doctoral candidate in the Department of Chemistry at the University of Ioannina (Greece). His research work centers on the question of how in different historical periods chemical experimentation has been developed in conjunction with philosophical conceptualization. Subjects under study include the emergence of Renaissance alchemy or chymistry under the horizon provided by occultism, the dissemination of chymistry in Greek-speaking communities of the Ottoman Empire from the 17th to the 18th century, and, turning to a later period, the persistence of some eminent experimenters, such as Joseph Priestley and Humphry Davy, in the philosophical dimension of chemistry. Koutalis is a CHF 2010-2011 Allington Fellow.



APS Museum Calendar:

Museum Exhibition

Philosophical Hall
104 South Fifth Street

Philadelphia, PA 19106 Donation Requested: \$1

Friday, October 29, 2010 at 5:30 PM

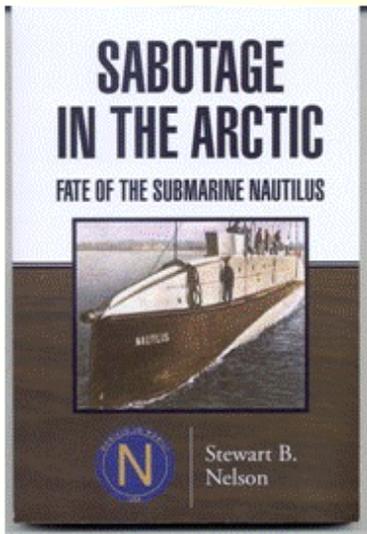
Sabotage in the Arctic: Fate of the Submarine Nautilus of 1931

STEWART B. NELSON

Benjamin Franklin Hall, 427 Chestnut Street

A lecture, reception, and book signing • Reception: 5:30 p.m. • Program: 6:00 p.m.

Dr. Stewart B. Nelson is an oceanographer and former president of the American Oceanic Organization. He holds a doctorate degree from the University of Southern California, as well as numerous awards and honors. Dr. Nelson will present a lecture and illustrated presentation about the 1931 expedition of Nautilus, the world's first Arctic submarine, and his rediscovery of the vessel in 2005 off Bergen, Norway. Many considered it foolhardy, others a publicity stunt, but Australian adventurer



Sir Hubert Wilkins was determined to be the first to use a submarine to cross the Arctic Ocean by way of the North Pole. When at the Pole, he planned to drill up through the ice and rendezvous with the German airship Graf Zeppelin. A decommissioned U.S. Navy World War I submarine was leased and extensively modified for under-ice operation. Christened the Nautilus, it eventually reached the icepack but sabotage by some crew members forced a return to Bergen, Norway. Dr. Nelson's talk will explore how he used a manned submersible to re-discover and document the largely forgotten Nautilus of the Wilkins-Ellsworth Trans Arctic Submarine Expedition of 1931.

RSVP: <http://www.amphilsoc.org/library/events/10292010>

Wednesday, November 17, 2010 at 5:30 PM

George Washington's America: A Biography Through His Maps

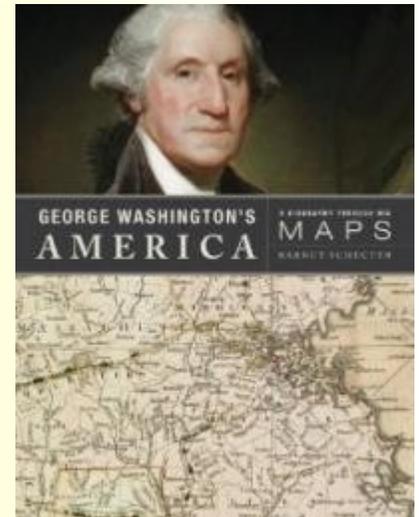
BARNET SCHECTER

Benjamin Franklin Hall, 427 Chestnut Street

Please join us for a lecture, reception, and book signing Wednesday, November 17, 2010 • Reception: 5:30 p.m. • Program: 6:00 p.m.

Barnet Schecter is a Manhattan-based writer and historian.

His interest in architecture, urban planning, and urban history evolved from his first career, as a sculptor. He holds a B.A., magna cum laude, from Yale University and an M.F.A. from Queens College, CUNY. From his teens until his death, the maps George Washington purchased and drew were always central to his work—as surveyor, military



leader, private citizen, and statesman. After his death, many of the most important maps he had acquired were bound into an atlas, which remained in his family for almost a century before it was sold and eventually ended up at Yale University's Sterling Memorial Library. By allowing readers to visualize history through Washington's eyes, to see events as they unfolded on the maps he studied, George Washington's America offers a unique perspective on history, and important new insight into Washington's character and his transformation from private citizen to founding father.

RSVP: <http://www.amphilsoc.org/library/events/11172010>

Library Lectures at the American Philosophical Society are free and open to the public. Reservations are necessary. All events take place in Benjamin Franklin Hall, 427 Chestnut Street, Philadelphia, PA 19106. Each event will be followed by a book signing where authors' books will be available for purchase.

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

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

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

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

**Mail checks to:
PhACT
639 W. Ellet Street
Philadelphia, PA 19119**

Name: _____

Address: _____

Phone: _____ E_mail _____

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

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

If you are not a supporting member/subscriber we invite you to become one. \$15 for a one year membership to PhACT with email Phactum subscription. \$25 for US Mail subscription. \$10 for students, email only. Donations are welcome.

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

PhACT's High School Science Fair Student Prize Funds

Total contributed for 2010 prizes	= \$318.00
2010 Goal	= \$300.00
Leftover funds from 2010 fund contributions to 2011 prizes	= \$ 18.00
Total 2011 Prize Fund	= \$375.00
2011 Goal	= \$393.00
	= ????

Please donate. Small contributions are preferred and donations in excess of the 2011 goal will be applied to the 2012 Prize Fund or some other youth science education project not yet determined.

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

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Contact the editor, Ray Haupt: phactpublicity@aol.com

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