

The race is not [always] to the swift, nor the battle to the strong. - Ecclesiastes 9:11



It may not be that the race is not always to the swift, nor the battle to the strong - but that is the way to bet. - **Damon Runyon**

# Phactum

The Newsletter of the  
Philadelphia Association for Critical Thinking  
**April 2008**

editor: Ray Haupt    email: [phactpublicity@aol.com](mailto:phactpublicity@aol.com)    [www.phact.org](http://www.phact.org)

**On April 19, 1882, 126 years ago, Charles Darwin died** and purely by coincidence the **April 19, 2008 PhACT Lecture and discussion** will be led by scientist **Andrew J. Petto, Ph.D.**: the topics being Darwin, evolution, creationism, and the ongoing social and legal tussle between Science and Religion in America's public school classrooms. Dr. Petto is co-editor of the book "*Scientists Confront Intelligent Design and Creationism*", is a senior lecturer in anatomy and physiology at the University of Wisconsin, and has been on the Board of Directors of the **National Center for Science Education (NCSE)** since 1995. He has been active in promoting evolution in state science education standards in Pennsylvania and Wisconsin, working with education agencies to refine state standards on evolution, biological variation, and adaptation. He has also consulted with several school districts to improve the presentation of evolution in the curriculum. Since 1994, Petto has been actively involved in professional development activities for teachers in social and biological sciences, especially in the area of evolution education and the sociopolitical forces that teachers face in presenting this fundamental biological theory.



I grant you evolution was a theory to begin with...  
but it evolved into a fact a long time ago!

It truly was coincidental that Dr. Petto was scheduled to be in Philadelphia and available to speak to a PhACT audience, but another Evolution/Creation event is happening on that same weekend and it is not so clear that it is just by happenstance. The controversial documentary film titled

*(Continued on page 4)*

## The PhACT Council

Eric Krieg, President  
Bob Glickman, Secretary  
Ray Haupt, Treasurer  
Dr. David Cattell  
Dr. David Cragin  
Tom Napier  
Harry Rothwell  
Becky Strickland

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

If you are not a member/subscriber we invite you to become one by sending \$15 for a one year membership to PhACT, \$10 for students. Donations are welcome.

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

# PHACT CALENDAR

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, 17th and Spring Garden Streets, West Building Room W2-48. **Meetings are free and open to the public unless otherwise noted.**

**Saturday, April 19, 2008 - Andrew J. Petto, PhD**, will discuss his book, and he will give an update of what is new in the ongoing tussle between Science and Religion in America's public school classrooms. By odd coincidence this PhACT lecture about the work and controversies surrounding one of the most influential scientists of all time will occur on the date of Charles Darwin's death, 126 years ago, in 1882. The book, "*Scientists Confront Intelligent Design and Creationism*", will be available for purchase at this event.

**Saturday, May 17, 2008 - Media Integrity Panel Discussion including Philadelphia Inquirer columnist Faye Flam, KYW News Radio personality Tony Romeo, and Fox TV News reporter Bruce Gordon.** At Noon at Edible's in Horsham on Saturday May 17<sup>th</sup>, we will have a panel discussion about media issues. This costs 25\$ per person and must be paid in advance. See page 3 for more details.

**Sunday, July 13, 2008 - PhACT Picnic.** Details TBA. This event is Free but is reserved for members and their guests only.

**Saturday, September 20, 2008 - Innumeracy – Math in Society by John Allen Paulos.** John has been a major source of mathematical input to the media for years and has written books including *Irreligion*, *Innumeracy*, *A Mathematician Plays The Stock Market*, *Beyond Numeracy*, *A Mathematician Reads the Newspaper*, *Once Upon A Number*, and *I Think Therefore I Laugh*. You can see more information on John's writings at <http://www.math.temple.edu/~paulos/>

**Friday, April 11, 2008 at 8:00 PM. Delaware Valley Mensa General Membership Meeting.** Monthly Meetings are always open to family, friends, interested others, and the public. See the "Events Calendar" on the Mensa website for more information:

<http://dvm.us.mensa.org/>. At the Police Administration Building, 750 Race Street, Philadelphia.

**APRIL Monthly Meeting -**

**CHOCOLATE - Tracie Tiberi**

is a chocolatier and will bring all sorts of heaven with her. Dove Chocolate (R) is her palette and with **CHOCOLATE** as her medium, she will illustrate how to be creative with **CHOCOLATE**. All sorts of "tricks of the trade" will be made known to those in attendance: things such as how to make a chocolate molten cake, chocolate mousse, dessert cups and even a chocolate martini. All in one place, can life get any better than this? If you love **CHOCOLATE**, and who doesn't, then this is one GMM you will definitely not want to miss.



**Wednesday, April 16th, 2008 at 4:00PM. Austin Dacey | The Secular Conscience: Why Belief Belongs in the Public Conscience.** Austin Dacey is a philosopher and representative to the United Nations for the Center for Inquiry. His newest book argues against the cliché "there can be no morality without God" and discusses the

necessity of secular morality in the public sphere. **Hosted by Secular Penn of the University of Pennsylvania.** No tickets required. **FREE ADMISSION.** Call 631-255-2043 for details about location.

**Wednesday, April 23, 2008 at 12:00PM** at the Free Library of Philadelphia, 19th and Benjamin Franklin Parkway. **Roger Mudd | The Place to Be: Washington, CBS, and the Glory Days of Television News.** Peabody and Emmy Award-winner Roger Mudd joined CBS in 1961, and as a congressional correspondent became a household name covering the historic Senate debate over the 1964 Civil Rights Act. In *The Place to Be*, Mudd describes the CBS news bureau of that era--the rivalries, the egos, and the frustrations involved in conveying world events to a national television audience in 30 minutes, minus commercials. **FREE.** No tickets required. For Info: 215-567-4341.

**Friday, June 13, 2008 8:00PM to Midnight. Freethought Society of Greater Philadelphia's Anti-Superstition Bash 2008!**

"Friggatriskaidekaphobia Treatment Center". At the Radisson-Warwick Plaza Hotel, 1701 Locust Street, Philadelphia. Featuring Special Guests: James Randi, a.k.a. "The Amazing Randi!" and Dr. Stephen Uhl, Author of *Imagine No Superstition*. General Admission: \$10. Free for children 13 and under. Tickets available at the door. For more information, call 610-430-7719 or email [fsgp@freethought.org](mailto:fsgp@freethought.org)

**Thursday, June 26-29, 2008** at University of Pennsylvania. **International Cultic Studies Association - 2008 Annual International Conference.** ICSA's 2008 conference has a rich program

# PHACT CALENDAR

for former group members, families, mental health professionals, researchers, legal professionals, and others. More than 100 speakers - experts from around the world - will contribute to the conference. The conference includes abundant time for breaks and meals, as well as evening socials with free refreshments. This gives attendees many opportunities to talk informally with speakers and other attendees. This is *the* conference to attend, if you want to learn about this field, meet experts, sharpen your professional skills, find out about current research, or enhance your capacity to help yourself or a loved one adversely affected by a cultic experience. You must register for this event. Website: [http://www.icsahome.com/infoserv\\_conferences/conference\\_home\\_2008.asp](http://www.icsahome.com/infoserv_conferences/conference_home_2008.asp)

The **PhACT Calendar** is open to members and non-members who wish to announce meetings and events of other groups of which they are interested or affiliated. These events should be of some general interest to the Skeptical or Scientific community and should be within a reasonable radius of Philadelphia. Send submissions to the editor at [phactpublicity@aol.com](mailto:phactpublicity@aol.com). Keep the announcements brief. Space is limited and insertions will be made on a first come-first served basis after the needs of PhACT are accomplished.

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## PhACT Luncheon Meeting

Come to the **PhACT Luncheon on May 17, 2008** at Edibles Restaurant in Horsham, PA for a buffet luncheon and enlightening "Media Integrity Panel Discussion" featuring Philadelphia Inquirer columnist **Faye Flam**, station KYW radio news journalist **Tony Romeo**, and local Fox TV news reporter **Bruce Gordon**. The major topic of discussion will be media responsibility in the matters of presenting fair coverage of science and pseudo science topics.

This event is one of the few PhACT events that is not free. The cost is \$25, \$15 for students, but otherwise is open to all who wish to attend and have made reservations and paid in advance. Please send reservations and checks payable to PhACT to 639 W. Ellet Street, Philadelphia, PA 19119. Seating is limited to 40 and reservations will be honored according to postmarked date.

At noon on May 17, 2008 at Edibles Restaurant in Horsham PA. Reservations will be confirmed by email or US Mail along with detailed driving directions and a map of the area.

## Wagner Free Institute of Science

1700 West Montgomery Avenue  
Philadelphia, PA 19121  
ph 215-763-6529 [www.wagnerfreeinstitute.org](http://www.wagnerfreeinstitute.org)

The Wagner Institute's natural history museum contains more than 100,000 specimens illustrating the various branches of the natural world. The Museum includes founder William Wagner's mineral collection - one of the oldest in the country - and his fossil collection, representing many important European and American localities and collecting sites of the nineteenth century. Mounted animal skeletons, skulls, and skins; birds; an extensive regional entomological collection; and shells from around the world are on display, along with fossils collected on Institute-sponsored expeditions to the American South, Northeast, and Mid-Atlantic regions. All specimens are displayed in the cherry wood cases constructed for them in the 1880s, and many retain the original handwritten curator's labels. The exhibit is one of the largest systematically-arranged collections on display in the country.

### Highlights from the Museum Collection

**Case 77: Kiwi, Accession No. 2870. Purchased in New Zealand by Joseph Leidy, 1891.** The kiwi bird is the smallest of the *ratites*, a group of flightless birds which also includes the emu and the ostrich featured in Case 81. It is native to New Zealand, and many varieties within the four kiwi species are now on the verge of extinction. The Brown Kiwi is perhaps the most famous, known for its long nose and short temper. All kiwi tend to be somewhat reclusive, perhaps owing to their nocturnal habits. The kiwi is the only bird in the world that has nostrils at the end of its beak. The female kiwi also has the largest egg in proportion to its body size of any bird in the world (with the possible exception of the hummingbird, featured in Case 42A); the kiwi's egg is almost as large as that of an ostrich, making it about four times larger than a chicken egg.



**Case 60B: Saber-Toothed Cat (type fossil), Accession No. 4072. Discovered in Florida and donated by Joseph Wilcox, 1891.** Discovered by researchers from the Wagner Institute in the late 1800's under the direction of Dr. Joseph Leidy, *Smilodon* was the largest of all the saber-tooth-cats. It is believed to have first appeared on earth 1.6 million years ago. It lived during the earth's last ice age, and went extinct 11,000 years ago. *Smilodon* was a fierce predator, weighing about 440 pounds. It had relatively short legs, better adapted for springing onto its prey than engaging in long chases. Its saber-like teeth were serrated, and could grow up to seven inches long. Its hunting strategy may have been to mortally wound its prey with its sharp teeth. It most likely ate mammoth, rhinoceros, and other thick-skinned animals.

The Museum is open to visitors Tuesday through Friday from 9 AM - 4 PM for self-guided tours. Groups of more than six people are asked to phone in advance for reservations by calling (215) 763-6529, ext. 17. Admission is free; donations are encouraged.

(Continued from page 1)

*Expelled: No Intelligence Allowed* featuring Ben Stein is scheduled to open nationwide on April 18, 2008, on the weekend of Darwin's death. This should be an interesting film experience for those who are concerned about the Creation vs. Evolution debate. Stein takes the Intelligent Design side of this story, insisting that both sides of the "controversy" should be taught in science classrooms. Stein defends his position on his weblog: <http://expelledthemovie.com/blog/2007/08/21/bens-blog/>. Dr. Petto will critique this film as part of his discussion so don't go dashing out to the movie beforehand as you might just prefer to save your money.

This meeting will be hosted by Dr. David Cattell, Chairman of the Physics Department of Community College of Philadelphia. At 2:00 PM, Community College of Philadelphia, 17th and Spring Garden Streets, West Building Room W2-48. Free and open to the public.

The book "*Scientists Confront Intelligent Design and Creationism*" will be available for purchase in the less expensive paperback edition.

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## Scientists Confront Intelligent Design and Creationism

*Andrew J. Petto and Laurie R. Godfrey, editors*

**W. W. Norton & Company**  
**ISBN: 0393050904**  
**Hardback, \$27.95**

From leading scientists, lawyers and educators, here is a new and decisive rebuttal to the assault on evolution from proponents of "intelligent design". With the pseudoscience of creationism rising again under the guise of "intelligent design", this powerful collection eviscerates the new assault on evolution and reveals the pervasive and insidious threat posed to genuine science by intelligent design proponents. The sixteen powerful, original essays address two key issues: the overwhelming scientific evidence for evolution gathered over 150 years and the dubious underpinnings of creationism; and how society can mount better educational and legal policies to prevent a theological takeover of public and scientific institutions. With creationist arguments forever morphing and reappearing under new aliases, this new confrontation is a ringing and lasting refutation of creationism's fraudulent claims.

## Election Announcement

Even more important than the Pennsylvania Presidential Primary Election in April, **PhACT** is holding elections for its Council at the meeting on April 19, 2008 at 1 PM in the West building, Room. W2-48, of the Philadelphia County Community College (17th and Spring Garden Streets). All members of PhACT in good standing are invited to come and vote in a **scandal free election**. People nominated for election are:

President - Eric Krieg

Secretary - Bob Glickman

Treasurer - Ray Haupt

Councilors - David Cattell, Dave Cragin, Tom Napier, Harry Rothwell, Becky Strickland

New Councilor - Mike Caro

## Letters

Editor: In the last issue of Phactum [March 2008] Joel Kauffman tells us a damage claim against thimerosal in a vaccine has now been won by a plaintiff for the first time. He didn't do his homework. The award in Poling v. HHS had nothing to do with thimerosal, any more than it had to do with the needles used for the vaccinations. For an analysis of the complex facts of this case, the legal reasoning behind the award, and the machinations of the anti-vaccine activists, see Dr. David Gorski's excellent article at <http://www.sciencebasedmedicine.org/?p=66>.

In the same issue, Kauffman tries to tell us vaccines cause diabetes. You can go to PubMed yourself and find lots of studies that tell us vaccines *don't* cause diabetes. Scientists who have looked at *all* the published data do not find that there is any link between vaccinations and diabetes.

In the same issue, Dr. Offit asks why these controversies persist when the science is clear. Part of the reason is that people like Kauffman insist on cherry-picking the literature and misrepresenting what the science really says.

Harriet Hall, MD

The SkepDoc

Puyallup, WA

Editor: The "protest" of Dr. Hall in defending [www.Quackwatch.com](http://www.Quackwatch.com) (*Phactum*, Mar 08, p4) is best countered by presenting a tiny fraction of the evidence said not to exist on the protective effects of cholesterol. Dr. Hall's emphasis on the word "may" in the title of the paper I cited shows surpris-

ing ignorance of the conservatism of medical paper wording, and a failure to look at the actual paper (Ravnskov U, High cholesterol may protect against infections and atherosclerosis. *Q J Med* 2003;96:927-934). On p928 it reads: "A meta-analysis of 19 cohort studies including 68 406 deaths, found an inverse correlation between t-C [total cholesterol] and mortality from respiratory and gastrointestinal diseases, most of which are of an infectious origin... Also, in a 15-year follow-up study of more than 120,000 individuals, Iribarren et al. found a strong inverse association between t-C (as determined initially) and the risk of being admitted to hospital due to an infectious disease." Many other examples with citations were given. And on p932: "...the lack of exposure-response in the trials between changes in LDL-cholesterol and clinical and angiographic outcome, the inverse association between change of cholesterol and angiographic changes seen in observational studies, the significant increase in complicated atherosclerotic lesions in the treatment group after cholesterol lowering by diet, and most of all, the fact that high cholesterol predicts longevity rather than mortality in old people, suggests that the role, if any, of high cholesterol must be trivial."

Dr. Hall was correct only in noting that the Ravnskov paper did not mention cancer. Here is a tiny fraction of the evidence for the correlation of low cholesterol levels with cancer: When t-C levels decrease (yes, decrease) on their own, death is imminent. The Institut National de la Santé et de la Recherche Médicale, Unit 258, Hopital Broussais, Paris, France, studied 6230

working men, age 43-52 years at baseline, whose t-C was measured 3-5 times annually. There was a weak inverse association between baseline t-C and cancer mortality. After 17 years of follow-up, those whose t-C dropped the most, the bottom quartile, were 30% more likely to die from cancer when allowance was made for age, baseline t-C level, TG, BMI, smoking, and systolic blood pressure. When the adjustment of the raw data was made for age alone, those whose TC dropped the most from a mean baseline level of 222 mg/dL were about 25% more likely to die from cancer. Those men whose TC dropped below 180 mg/dL were in this bottom quartile (Zureik M, Courbon D, Ducimetière P (1997). Decline in Serum Cholesterol and the Risk of Death from Cancer. *Epidemiology* 8:137-143).

Published simultaneously in the same journal, *Epidemiology*, a study from the Medical Statistics Unit, London School of Hygiene and Tropical Medicine, England, used data from the Framingham Study on 5209 men and women. The odds of cancer death were up to twice as great (RR = 2) if a large prior fall in t-C occurred over any 4- to 6-year period. This was a \*38 mg/dL drop from the mean level of 230 mg/dL in men or women when they were 46-50 years

old who were about to die of cancer. Here, too, the degree of drop in t-C was more predictive than the baseline level of t-C (Sharp SJ, Pocock SJ (1997). Time Trends in Serum Cholesterol before Cancer Death. *Epidemiology* 8:132-136).

So readers beware of cholesterol dogma from biased sources — your life depends on it.

Joel M. Kauffman, PhD  
Berwyn, PA

Editor: In no way does this [Dr. Kauffman's letter] counter my defense of Quackwatch. It's just another example of cherry-picking the literature and of trying to justify the misrepresentation of what a published article said.

Harriet Hall, MD  
The SkepDoc  
Puyallup, WA

Editor: In the March 2008 issue of Phactum there is a note from Joel Kaufmann quoting articles written by JB Classen and DC Classen concerning a putative association between

vaccines and diabetes. Among the statements made by the Classens are that vaccines cause diabetes in 1 in 2000 vaccinated children, and in 5% of children with a family history of diabetes. Kaufmann alleges that the data in published papers prove the link, that this research is widely accepted, and refers readers to a vaccine safety website.

What Kaufmann does not say is that the Classens' research is largely published in fringe journals like the *Open Pediatric Medical Journal*, that the web-

site is run by Classen, that many large studies (referenced below) have been published in major journals that refute the idea hypothesized by the Classens, and that it is preposterous to say that their research is "widely accepted." For the tone of the Classens science, and its rejection by others also see TO Jefferson et al, *Brit Med J.*, 29 May, 1999, p. 1487.

In the interest of full disclosure I will note that I have worked on vaccines for 50 years, that I consult for a number of vaccine manufacturers and that I happen to be acquainted with Kaufmann, who should know better. It is important to keep one's mind open to new hypotheses, but sometimes a skeptic needs to be skeptical of skepticism.

**Anonymous.** *Childhood immunizations and type 1 diabetes: summary of an Institute for Vaccine Safety Workshop. The Institute for Vaccine Safety Diabetes Workshop Panel. *Pediatr Infect Dis J* 1999;18(3):217-222.*

**Black SB, Lewis E, Shinefield HR et al.** *Lack of association between receipt of conjugate haemophilus influenzae type B vaccine (HbOC) in infancy and risk of type 1 (juvenile onset) diabetes: long term follow-up of the HbOC efficacy trial cohort. *Pediatr Infect Dis J* 2002;21(6):568-569.*

**DeStefano F, Mullooly JP, Okoro CA et al.** *Childhood vaccinations, vaccination timing, and risk of type 1 diabetes mellitus. *Pedi-**



Polio vaccination - 1957

iatrics 2001;108(6):E112.

**Graves PM, Barriga KJ, Norris JM et al.** Lack of association between early childhood immunizations and beta-cell autoimmunity. *Diabetes Care* 1999;22(10):1694-1697.

**Heijbel H, Chen RT, Dahlquist G.** Cumulative incidence of childhood-onset IDDM is unaffected by pertussis immunization. *Diabetes Care* 1997;20(2):173-175.

**Hummel M, Fuchtenbusch M, Schenker M, Ziegler AG.** No major association of breast-feeding, vaccinations, and childhood viral diseases with early islet autoimmunity in the German BABY-DIAB Study. *Diabetes Care* 2000;23(7):969-974.

**Hviid A, Stellfeld M, Wohlfahrt J, Melbye M.** Childhood vaccination and type 1 diabetes. *N Engl J Med* 2004;350(14):1398-1404.

**Hviid A.** Postlicensure epidemiology of childhood vaccination: the Danish experience. *Expert Rev Vaccines* 2006;5(5):641-649.

**Karvonen M, Cepaitis Z, Tuomilehto J.** Association between type 1 diabetes and Haemophilus influenzae type b vaccination: birth cohort study. *BMJ* 1999;318(7192):1169-1172.

**Ravel G, Christ M, Liberge P, Burnett R, Descotes J.** Effects of two pediatric vaccines on autoimmune diabetes in NOD female mice. *Toxicol Lett* 2003;146(1):93-100.

Stanley A. Plotkin, MD  
Emeritus Professor of Pediatrics  
University of Pennsylvania

Editor: I was at a Mensa weekend in Woodbridge, NJ, in March. The keynote speaker was [former governor of New Jersey] Jim Florio speaking on global warming, the possible political ways of dealing with it and the trade-offs between them. When he got to hydrogen fuel-cell research I cringed when he came out with that old line about how much hydro-



Hydrogen transportation,  
New Jersey style , 1937

gen we have. After his talk I tactfully explained to him that hydrogen isn't an energy source, merely a way of storing energy generated by other means such as wind or nuclear power. He asked some reasonable questions but sounded a little unconvinced. With

luck he'll ask some assistant to check out the literature before he gives that talk again.

Tom Napier  
North Wales, PA

Editor: Philadelphia has the privilege this year of being host to the International Cultic Studies Association's annual meeting. Featured will be people with a variety of kinds of expertise on psychologically destructive groups, and there will be programming tracks specifically for former members, family members, and mental health professionals.

Its being held here is quite fortuitous for me, since I only

came to realize in the past couple years that I had once belonged to such a group and that it's continued to have harmful aftereffects. I've already registered for the pre-conference workshops for former group members.

Eric Hamell  
Philadelphia, PA

*Editors note: See the PhACT Calendar, pages 2,3 for more details.*

Editor: I am a new member/subscriber. For me, it feels good to be a part of an organization that shines the brilliant torch of reason on the deceivers, who desire belief by mere loud and persistent assertion. I am glad to be a part of an organization that helps confront the absurdities, and distractions, of "intelligent design" and creationism. I look forward to future events that act to enfranchise and empower rational thought. I close with a quote from my hero Robert Green Ingersoll, "We are looking for the time when the useful shall be the honorable; and when Reason, throned upon the world's brain, shall be the King of Kings, and God of Gods." Best wishes and efforts.

Scott Pleune  
Philadelphia, PA

Editor: People have been telling me for years that I should write my memoirs, so I finally did. I used an on-demand publisher that doesn't do any publicity, so I'm depending on word of mouth to spread the news. If you can think of anyone you know who might be interested, please pass it on.

Harriet Hall, MD  
The SkepDoc

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*"Women Aren't Supposed to Fly: The Memoirs of a Female Flight Surgeon"* is now available for sale at [http://www.iuniverse.com/bookstore/book\\_detail.asp?isbn=0-595-49958-9](http://www.iuniverse.com/bookstore/book_detail.asp?isbn=0-595-49958-9) and also on Amazon.com. The iUniverse website offers an electronic version for \$6. The cover calls it "An irreverent romp through the worlds of medicine and the military: part autobiography, part social history, and part laugh-out-loud comedy." The back cover says, "When the author graduated from medical school only 7% of American doctors were women. As the second woman ever to do an Air Force internship, she had to fight for acceptance. Even a patient's 3 year old daughter proclaimed, "Oh, Daddy! That's not a doctor, that's a lady!" She was refused a residency, paid less than her male counterparts, couldn't live on base, and couldn't claim her husband as a dependent because he wasn't a wife. After six years as a general medical officer in Franco's Spain, she became a family practice specialist and a flight surgeon, doing everything from delivering babies to flying a B-52. She earned her pilot's license despite being told "Women aren't supposed to fly" and eventually retired from the Air Force as a full colonel. She is witness to an era when society was beginning to accept women in traditionally male jobs but didn't entirely like the idea yet. She found unconventional ways to cope, like admitting a spider to the hospital! Her warped sense of humor sustained her and it spices the stories she tells about her experiences and the patients and colleagues she encountered."

## Various Ruminations

Collected/written by Ray Haupt, editor  
(with help from others)

### Evolution - The Magazine

The NCSE weekly newsletter reports that the second issue of *Evolution: Education and Outreach* -- the new journal aspiring to promote accurate understanding and comprehensive teaching of evolutionary theory for a wide audience -- is now available on-line. Featured are original scientific articles on such topics as evolutionary medicine, evolutionary trees, and punctuated equilibrium; curriculum articles on such topics as using *Inherit the Wind* in the science classroom, molecular evolution and HIV, and hominid evolution; and reviews of a host of books, including David Sloan Wilson's

*Evolution for Everyone* and Philip Kitcher's *Living with Darwin*. Those interested in the intersection of science and art will enjoy a report on Esther Solondz's *The Evolution of Darwin* installation as well as a description of a project fusing evolutionary biology with ceramics and printmaking.

Also included is the second installment of NCSE's regular column for *Evolution: Educa-*

*tion and Outreach*, *Overcoming Obstacles to Evolution Education*. In *"The OOPSIE Compromise -- A Big Mistake,"* NCSE's Eugenie C. Scott and Glenn Branch write, "Opt-out policies are typically invoked to excuse students from activities to which they or their parents may have religious objections, such as reciting the Pledge of Allegiance, dissecting animals in a laboratory, or attending sex education classes. Occasionally, however, a school or school district allows students to opt out of academic topics, including, sometimes, evolution. Opt-out policies specifically including evolution are a big mistake -- for the students who opt out, for their classmates whose studies are disrupted, and especially for their teachers, who cannot fulfill their duty to instruct their charges about biology without emphasizing evolution."

For the second issue of *Evolution: Education and Outreach*, visit: <http://www.springerlink.com/content/120878/>

For Scott and Branch's article, visit: <http://www.springerlink.com/content/8q68410q05048h68/fulltext.html>

### Sir Arthur C. Clarke, R.I.P.

Visionary author Sir Arthur C. Clarke, a master science fiction and science writer who won worldwide acclaim with more than 100 books on space, science and the future, died

Wednesday, March 18, 2008 in his home in Sri Lanka. Clarke had completed 90 orbits around the sun.

Clarke was born in Minehead, Somerset, England, in December 1917 and served as a radar specialist in the Royal Air Force during the second world war. He became involved in the British Interplanetary Society after the war, where he proposed the idea for satellites as telecommunications relays.

Clarke is best known for "2001: A Space Odyssey," his 1968 novel that became one of the most influential science fiction films ever to hit the silver screen, and was directed by Stanley Kubrick. Some of Clarke's other well known works include: "Childhood's End" (1953); "Rendezvous With Rama" (1973); and "The Fountains of Paradise" (1979).

With his passing few prominent authors from the "Golden Age" of science fiction remain alive and for that the genre is poorer.

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## Soundbites

Compiled by Becky Strickland

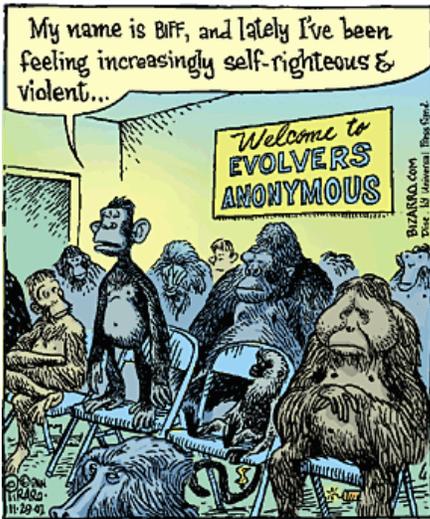
♣ "What does this decision mean? It doesn't mean anything. The question of whether vaccines cause autism is a scientific one, not a legal one" Dr. Paul Offit, Professor of Pediatrics, University of Pennsylvania School of Medicine, and Chief of Infectious Diseases, on the recent federal court ruling awarding financial compensation to a couple who claimed their daughter's autism was caused by vaccines. The ruling does not state that vaccines cause autism but that, in this case, the child's pre-existing condition was aggravated by vaccines. *New Scientist*, March 8, 2008.

♣ "Nobody has the right to unfettered liberty, and people do not have a right to endanger their kids." Bioethicist John Harris of the University of Manchester, UK, on parents in Belgium who were sentenced to five months in jail after refusing to vaccinate their children against polio. Associated Press, March 12, 2008.

- ♣ Dr. Paul Offit's 'must have' list of vaccines for adults -
- Tetanus, with boosters every 10 years
  - MMR (Measles Mumps, rubella), if you were born after 1957 and haven't had the disease or the vaccine already
  - Chicken Pox, if you are under 60 and were never vaccinated or infected
  - HPV (human papilloma vaccine)
  - Flu, especially if you are over 50
  - Hepatitis A, if you travel outside of Europe, Australia and Japan
  - Zostavax, the shingles vaccine, if you are over 60.

Reported in the April issue of Philadelphia Magazine, by Carol Saline.

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## PhACT endorses free energy

### Meeting Report

by Tom Napier

Most Phactum readers have heard of the "free energy" promoters that sell dealerships to the unwary. A dealership entitles you to sell devices that produce endless electricity by exploiting some loophole in the laws of thermodynamics. Unfortunately, these devices never materialize and won't work.

Systems that do work use roof-top photovoltaic cells to generate electricity. These are on the verge of becoming economic to install. Between these opposites lie passive space heating systems that harvest solar energy to heat your house. Even in Philadelphia, one sunny winter day can, in theory, supply enough heat to keep your house warm during several overcast ones.

Our speaker on March 15 was Nick Pine who described "Real Free Energy." Nick must be on the level, he's a former colleague of Eric Krieg. Nick designs systems that use the greenhouse effect to convert the solar input into hot air that is then used to heat a storage medium. The stored heat keeps your house at a comfortable temperature when the sun doesn't shine. As these systems require building a hot space or a solar room, they require significant add-ons to an existing building and are most easily incorporated into new construction.

According to Nick, traditional passive heating systems have used glass windows and have incorporated ground-level brick or concrete as the heat-storage medium. These systems have not been too effective at maintaining a comfortable temperature. They accumulate heat during the day but reradiate it during the night. At first the house is too hot, then it is too cold. They have, however, been very profitable for the building-supply industry.

Nick tries to convince home-builders and their architects of the utility of a less conventional approach. For a start, he recommends using corrugated or hollow polycarbonate sheet rather than glass. This is cheaper and lighter and it admits more solar energy for a given wall or roof size. It also appears to be quite durable when exposed to the weather. Its downside is that it expands more than glass and must be mounted in a way that allows for this. Nick also favors building with plastic foam with heavy plywood bonded to both faces. This provides both structural strength and built-in insulation.

In Nick's heating systems the incoming energy heats air in a small "hot space" isolated from the rest of the house. This air then heats a storage medium, currently water. Nick would like to use a phase-change material, a salt mixture that

absorbs heat by melting at 75 F and gives it out again as it recrystallizes. Unfortunately, it is currently too expensive.

Nick likes to improvise heating systems from cheap off-the-shelf products rather than use the custom parts sold by the heating industry. Instead of a commercial heat exchanger to transfer heat from the air to water and back he uses automobile radiator/fan assemblies. Since the temperatures encountered are quite low, he plumbs his systems with cheap plastic hose rather than copper tubing. Hot air flow is controlled by home-made dampers opened by car wiper motors.

Nick's electrical engineering background emerged in the analogy of the electrical Ohm's Law he uses to compute heat flow and to estimate how long a given amount of hot water

can heat a house. He uses temperature and humidity sensors linked via a cheap one-wire control bus to an industrial-grade 486 PC about half the size of a paper-back book. This controller opens and shuts dampers and turns fans on and off to maintain a comfortable temperature and make the best use of the solar heat available. You can even have an Internet connection that will let you supervise and control your house from a remote location. (It would be nice if the system could be linked to a weather forecasting site to anticipate the need for extra heat.)

With Nick's approach you still need electricity to light your house, to supply a little extra heat on cold dull days and to top up water to shower temperature but you should be able to greatly reduce your heating bills. And, unlike the "free energy" promoters, Nick doesn't sell dealerships.

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**Help!!!** PhACT needs help and surely you can easily guess exactly what kind of help that might be. It bothers us to beggar our members and associates, but the treasury is low and the cost of producing a newsletter is high. That combination eats up the treasury which is close to exhaustion. A sad fact of PhACT is that we do not have funds to effectively engage in worthy projects such as being a sponsor of a high school science fair, to fund a Boy Scout troop outing to the Franklin Institute, or to offer a small donation to the Community College of Philadelphia scholarship fund. Would it not be terrific if we could underwrite an annual science lecture, free and open to the general public, at a prestigious location such as the Wagner Free Institute of Science? We would like to do those things and even more, but ..... \$\$\$\$.

**Please help if you can.**





# PHACT

Phila. Assoc. for Critical Thinking  
639 W. Ellet Street  
Philadelphia, PA 19119



Richard Henry Lee  
(1732 - 1797)  
American Statesman

## USS Philadelphia and the Civil War

The third ship in the American navy called *USS Philadelphia* was an iron-hulled side-wheel steamer built in 1859 at a shipyard in Chester, Pennsylvania. *Philadelphia* was designed for commercial traffic as a



USS Philadelphia

river boat on the Potomac. After the outbreak of Civil War hostilities *Philadelphia* was seized on April 21, 1861, in accordance with a Presidential order. She was ordered to the Washington Navy

Yard, where she fitted out for naval service.

Being a side-wheeler, *Philadelphia* was not well suited for duty at sea but did operate effectively as a patrol vessel on the Potomac. In October of 1861 *Philadelphia* was assigned to the North Atlantic Blockade Squadron and in January 1862 became the flagship of Rear Admiral Samuel Phillips Lee.

Admiral Lee, had a distinguished navel career and came from a most distinguished Virginia family. He was the grandson of Richard Henry Lee of Virginia who was a member of the Continental Congress, was a signer of the Declaration of Independence, and served as the sixth President of the United States under the Articles of Confederation. Richard Henry Lee was the great uncle of General Robert E. Lee. Admiral Lee and General Lee were third cousins.

From August 1863 until 1865 *Philadelphia* was flagship of the South Atlantic Blockading Squadron. The highlight of her activities during this period was her participation in the operation against Charleston, South Carolina in the fall of 1863.

With the ending of hostilities *Philadelphia* was sent to the Washington Navy Yard where she decommissioned 31 August 1865. She was sold at public auction 15 September to N. L. and G. Griswold. Renamed *Ironsides* in 1869, she was lost by stranding at Hog Island, Virginia, on 29 August 1873.



Samuel Phillips Lee,  
United States Navy  
Rear Admiral