

# Phactum



The Newsletter of the Philadelphia Association for Critical Thinking  
**March 2007**

editor: Ray Haupt

[www.phact.org](http://www.phact.org)

The next **PhACT** meeting will be at **2:00 PM on Saturday, March 17, 2007**, hosted by Dr. David Cattell, chairman of the Physic Department at Philadelphia Community College, 17th and Spring Garden Streets, West Building Room W2-48. The topic will be: **Vaccine Safety: Science, Politics and the Media.**

In the last few weeks the subject of immunization has received some prominent attention because of plans in Texas to immunize 6th grade girls against cervical cancer. To many this seems like a good idea, to others it seems like an intrusion by government. Furthermore there are always fears of unintended consequences. Drugs have been known to have severe complications, think of thalidamide. But other drugs, such as smallpox and polio vaccination have had major positive effects. At the March 17 Phact Meeting you will have a splendid opportunity to discuss these controversies and fears with a world renowned expert in the field of vaccinology.

**Paul A. Offit, MD** is the Chief of the Division of Infectious Diseases and the Director of the Vaccine Education Center at the Children's Hospital of Philadelphia. In addition, Dr. Offit is the Maurice R. Hilleman Professor of Vaccinology and a Professor of Pediatrics at the University of Pennsylvania School of Medicine. He is a recipient of many awards including the J. Edmund Bradley Prize for Excellence in Pediatrics from the University of Maryland Medical School, the Young Investigator Award in Vaccine Development from the Infectious Disease Society of America, and a Research Career Development Award from the National Institutes of Health.



Dr. Offit has published more than 120 papers in medical and scientific journals in the areas of rotavirus-specific immune responses and vaccine safety. He is also the co-inventor of the rotavirus vaccine, RotaTeq, recently recommended for universal use in infants by the CDC; for this achievement Dr. Offit received the Gold Medal from the Children's Hospital of

*(Continued on page 4)*



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*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 subscriber we invite you to become one by sending \$15 for a one year membership to PhACT, \$10 for students.

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

**Saturday, March 17, 2007:** - The **Physics Department of Community College of Philadelphia** will host a meeting of **PhACT** - at 2:00 PM, Community College of Philadelphia, 17th and Spring Garden Streets, West Building Room W2-48. Dr. Paul A. Offit will discuss **Vaccine Safety: Science, Politics and the Media**. Dr. Offit is Chief, Division of Infectious Diseases, The Children's Hospital of Philadelphia, Professor of Pediatrics, Maurice R. Hilleman Professor of Vaccinology, The University of Pennsylvania School of Medicine. Dr. Offit is an internationally known speaker. He recently wrote the book: "The Cutter Incident".

**Saturday, April 21, 2007:** PhACT will host a buffet luncheon in honor of **Dr. Ted Daeschler**, a scientist working at the Academy of Natural Sciences in Philadelphia. Dr. Daeschler and his team discovered "Tiktaalik", an ancient transition species, and has contributed an enormous amount of new information in the field of Evolutionary Biology. This event will be at the Pike Restaurant outside of Philadelphia. See page 4 for more details.

**The Wagner Free Institute of Science** offers an assortment of science lectures presented at the introductory college level by professors from various universities around Philadelphia. These courses are free and vary from a single night to an eight week course. They do appreciate donations or memberships. See their website at <http://www.wagnerfreeinstitute.org/>.

**Monday, March 26, 2007**, beginning at 6:30 PM. **Botany Before, During, and After Linnaeus**, Professor Alfred E. Schuyler. Pennsylvania Horticultural Society, 100 N. 20th Street (20th and Arch Streets). 6 Mondays and 1 Saturday. This course will discuss the relevance of Linnaeus's system of binomial nomenclature and the systems that he and later botanists devised to classify plants in hierarchical groups. **Preregistration required for this course. To pre-register, call 215-763-6529, ext. 23.**

**Wednesday, March 28, 2007**, beginning at 6:30 PM. **Evolution and Society: The Social History of a Scientific Idea**, Professor Monique R. Scott. Independence Branch of the Free Library, 18 S. 7th Street (7th and Market Streets). 6 Mondays. This class explores the social impact of Darwinian evolution, from Darwin's impact on Victorian England to present day American politics surrounding human evolution.

**University of Pennsylvania Museum of Archaeology and Anthropology** presents **Amarna, Ancient Egypt's Place in the Sun**, a new exhibition that offers a rare look at the meteoric rise and fall of this unique royal city during one of Egypt's most intriguing times. The exhibition, the centerpiece of the Museum's event-filled "Year of Egypt runs through October 2007. Admission is free with museum admission, \$8 adults, \$5 seniors and students. Free Sunday afternoons until Memorial Day. For information: [www.museum.upenn.edu](http://www.museum.upenn.edu).

**Sun April 1, 2007** at University of Pennsylvania Museum at 1:30 PM. **Year of Egypt: Hollywood on the Nile Free Film Series : The Mummy (1932)** The first Sunday of each month, through May, the Museum screens blockbuster films offering a look at Egypt through the eyes of Hollywood. **Raiders of the Lost Ark (1981)**. The Museum continues its screening of blockbuster films which offer a look at Egypt through the eyes of Hollywood. Harrison Ford stars in this, the first of a trilogy of films by director

Steven Spielberg. Renowned archaeologist and expert in the occult Dr. Indiana Jones is hired by the U.S. government to find the Ark of the Covenant, which is believed to hold the ten commandments. Unfortunately, agents of Hitler are also after the Ark. Free.

At the **Franklin Institute** until September 30, 2007. 222 N. 20th St., Philadelphia, PA, 19103. **Tutankhamun and the Golden Age of the Pharaohs**. From 1976-1979 the Treasures of Tutankhamun exhibit toured the United States, attracting more than eight million visitors and inventing the phenomenon of the blockbuster museum show. In a highly publicized return visit, a larger selection of items from the famed pharaoh's fabulous tomb goes on a 27-month U.S. tour, introducing a whole new generation to the golden treasures of Egypt's Valley of the Kings. Tickets are timed and dated and must be reserved in advance. Call 1-877-888-8587.

**March 22, 2007 at 7:30 PM** in Philadelphia, PA. **Chestnut Hill College** is hosting a lecture by J. Wentzel van Huyssteen on "**Human Origins and the Emergence of Religious Awareness**". Van Huyssteen is the James I. McCord Professor of Theology and Science at the Princeton Theological Seminary and a Metanexus Academic Board Member. For more information, visit [www.metanexus.net/metanexus\\_online/show\\_article2.asp?id=9766](http://www.metanexus.net/metanexus_online/show_article2.asp?id=9766) or contact Kathleen Duffy, SSJ at [kduffy@chc.edu](mailto:kduffy@chc.edu).

**Friday, March 30, 2007** at the **Lutheran Theological Seminary**, 7301 Germantown Avenue, Philadelphia, PA 19119, in the Brossman Learning Center Room 101A, 6:30 to 9:00 PM. Dr. Andrew Petto, who was a PhACT speaker about three years ago, will be discussing his book "**Scientists Confront Intelligent Design and Creationism**". This event is free and open to the public. See page 9 for more details.

The PhACT Calendar is open to members, and non-members too, 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.

# Special Event

(for adults AND kids)

Get the inside scoop on a missing link who is no longer missing.

Come and enjoy a luncheon buffet with members of PhACT on Saturday, April 21, 2007. From 12:30 to 2:30 PM at The Pike Restaurant in Spring House, PA on the East side of Bethlehem Pike



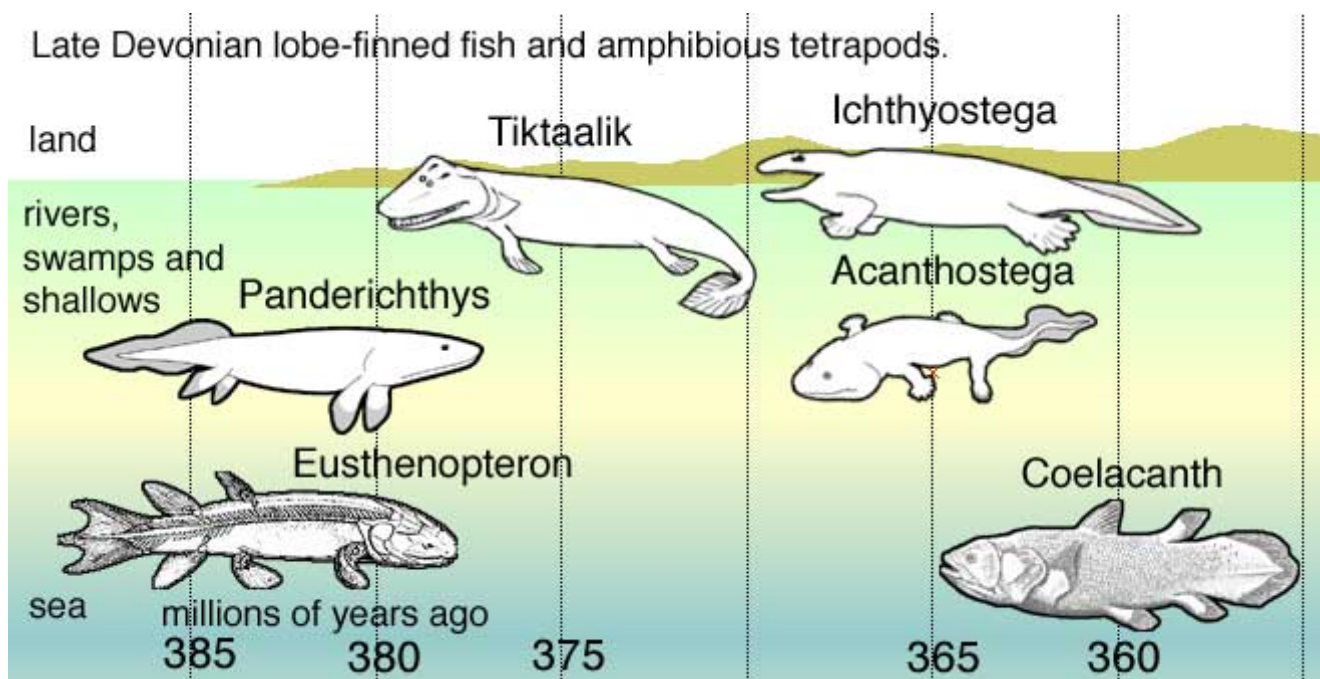
PhACT will honor **Dr. Ted Daeschler** at this luncheon. Dr. Daeschler will give an informal presentation of his adventures on Ellesmere Island; well north of the Arctic Circle.

Dr Daeschler, a scientist at the Academy of Natural Sciences in Philadelphia, with his team, explored portions of remote Ellesmere Island in northern Canada and discovered “Tiktaalik rosea”, a fossilized transition species from 450 million years ago, bridging the gap between fish and air breathing land animals. This event will be an opportunity to meet, in an informal social setting, a scientist whose discovery has had a great impact in the field of evolutionary biology.

Reserve a place for yourself and bring a friend too. The cost for this event is \$20 for adults, \$12.50 for children and students.

This would be a wonderful opportunity for kids to meet a scientist who not only knows dinosaurs and other ancient creatures, but has also dug them up and is not afraid to tell how to find them.

Reservations are a must. Send checks payable to PhACT and reservations to: PhACT, 639 W. Ellet Street, Philadelphia, PA 19119. Please respond no later than Monday, April 16, 2007.





(Continued from page 1)

Philadelphia and the Jonas Salk Medal from the Association for Professionals in Infection Control and Epidemiology. Dr Offit was also a member of the Advisory Committee on Immunization Practices to the Centers for Disease Control and Prevention and is the co-author of three books titled *Vaccines: What You Should Know* (Wiley, 2003, 3<sup>rd</sup> Edition), *Breaking the Antibiotic Habit* (Wiley, 1999) and *The Cutter Incident: How America's First Polio Vaccine Led to Today's Growing Vaccine Crisis* (Yale University Press, 2005). A fourth book, titled *Vaccinated: One Man's Quest to Defeat the World's Deadliest Diseases* (HarperCollins), will be published in the summer of 2007.

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## Vaccines: What You Should Know, 3rd Edition

Paul A. Offit, Louis M. Bell  
ISBN: 978-0-471-42004-0  
Paperback, 256 pages, April 2003

Get the straight facts about vaccines and make informed choices.

Do you wonder whether vaccines are safe and whether they are all really necessary? This completely revised and updated edition of the classic *Vaccines: What You Should Know* helps you sort through the latest information about vaccines in order to determine what is right for your family.

Coauthored by Paul Offit, a member of the CDC advisory committee that determines which vaccines are recommended for use in the United States, this guide tells you what vaccines are made of and clearly explains how they are made, how they work, and the risks associated with them.

This updated edition includes recommendations for the smallpox vaccine, the latest information on vaccines for travelers, and the latest on the progress of combination vaccines. Expanded information on vaccine safety includes discussion of vaccines and autism, mercury in vaccines, and the ability of children to toler-

ate numerous vaccines at once.

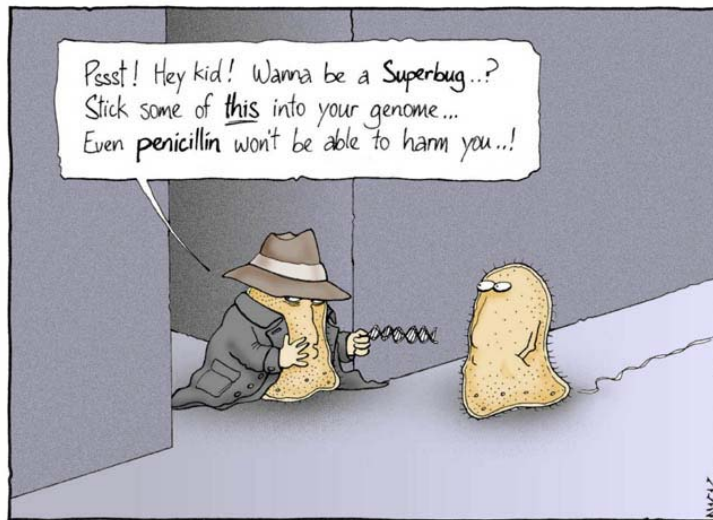
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## The Cutter Incident: How America's First Polio Vaccine Led to the Growing Vaccine Crisis

By Paul Offit, M.D., Published in October 2005  
Yale University Press, hardcover, 240 pages, 25 black and white illustrations

### From Publishers Weekly

After a wave of books celebrating the 50th anniversary of Jonas Salk's polio vaccine, Offit's troubling account is the first to focus on a largely forgotten aspect—one with negative repercussions 50 years later. In a nuanced examination of a complex story, Offit, a professor of pediatrics and expert in infectious diseases, relates how Cutter Laboratories, one of several pharmaceutical companies licensed to produce Salk's killed-virus vaccine, shipped many lots of vaccine containing live virus, creating a mini polio epidemic: 40,000 children became ill, 200



It was on a short-cut through the hospital kitchens that Albert was first approached by a member of the Antibiotic Resistance.

were permanently paralyzed, 10 died. Offit carefully examines how Cutter was and was not responsible: tests for detecting live virus at the time were simply not sensitive enough, but Cutter departed from Salk's safe production protocols. And while the company knew there was a problem, it failed to notify the government's oversight agency. Cutter faced costly lawsuits that have resulted, according to Offit, in today's vaccine crisis: shortages (think of last year's flu vaccine) due to pharmaceutical companies' unwillingness to risk testing and producing vaccines and face possible litigation. In another example of the law of unintended consequences, Offit shows how "the Cutter Incident" led Salk's vaccine to be replaced by a less safe one: Sabin's live-virus vaccine.

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**Erratta**

Gadzooks!!! A sharp eyed reader observed in the February edition that we stated that Punxsutawney Phil saw his shadow on Groundhog Day. That report was in error, he did not. As a result, Florida citrus growers are cautiously optimistic while farmers in Spain are preparing for diminished crops.

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**Letters**

Editor:

The William Penn quote in the February 2007 *Phactum* reminded me of an apropos story that's probably not true but it's a good story so its falsity shouldn't stop us from telling it: There was a witch trial in Pennsylvania presided over by none other than William Penn. Penn asked the alleged witch, "Hast thou ever ridden through the air on a broomstick?" The woman, who evidently didn't speak English, vigorously shook her head yes, whereupon Penn stated, "Well, I know of no law against it," and dismissed the case.

Howard J. Wilk  
Philadelphia

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**Various Ruminations**

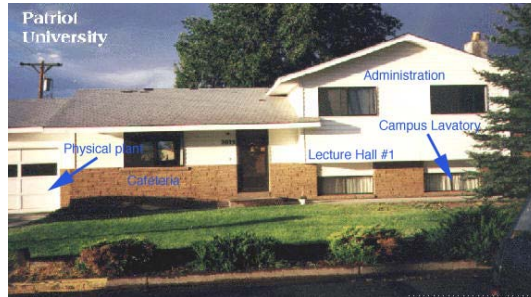
Collected/written by Ray Haupt, editor  
(with help from others)

**IRS 58, Dr. Dino 10**

Dr. Dino, otherwise known as Dr. Kent Hovind, was convicted on 58 counts of tax fraud in November 2006 and in January a federal judge sentenced him to 10 years in federal prison, plus an order to pay the government \$600,000 in restitution.

Dr. Hovind received an Bachelor of Religious Education undergraduate degree from the unaccredited Midwestern Baptist College and his Masters and Doctorate from Patriot University, an unaccredited correspondence school located in Colorado. He made quite a name for himself as an evangelist on the Creationism circuit as a lecturer, radio personality, and would on occasion debate at a university. At Temple

University a few years ago, I did attend a debate between Dr. Dino and a professor of biology whose name I do not recall. The professor was at a major disadvantage being



**The campus of Patriot University**

merely a scientist armed with facts and not a showman with a bag of razzle-dazzle tricks of limber logic, fabricated facts, and a busload of

enthralled enthusiasts toting Bibles. No serious scientist can debate such a person and "win". There is no winning in such an environment.

Hovind taught at some Christian schools and

**Jailbirds of a Feather**

Willie Sutton



Rev. Kent Hovind

went on to become a fierce Young Earth Creationist. He founded Dinosaur Adventure Land, a small theme park in Florida that proudly posits the whacky Young Earth Creationist theme that men and dinosaurs roamed the earth together between 4,000 and 6,000 years ago.

Hovind was not prosecuted for his religious beliefs, although it is likely that some might say that he was. What got the Good Reverend in deep trouble is the same as what finally got Al Capone ... federal taxes. This was a case of a Man of One Book bumping heads with a Man of a Different Book.

Would it not be ironic if Dr. Dino, in his new career of breaking rocks, were to do so in a fossil bed?

**Hooray for computer geeks!-**

"They're professionals. and here comes this army of nerds bashing down the doors" said James Frew of the University of California Santa Barbara, on the reaction of US Coastguard to friends and colleagues of Microsoft researcher Jim Gray, who used their computer skills to help find him after he went missing on a sailing trip January 28." New York Times, February 3, 2007.

### Science stifling

"These conditions are an ideological attack on the principles of freedom of academic research" said Angus McFarland, student council president at the University of Sydney, Australia, on the university's promise not to conduct stem cell research on land bought from a Catholic college. The Sydney Morning Herald, February 5, 2007

### Eeeek!!! There is a TRANSFAT!!!! Save us! Save us!!

Purging transfat from the American diet has become all the rage lately. The stuff is apparently not very good for you but has been around for many years in the form of artificially hydrogenated oils, and no doubt getting rid of the artery clogging goop is a good idea. Some cities, especially New York City, have banned it or are considering doing so.

Philadelphia's City Council has recently passed a bill to force food vendors to eliminate the use of transfats from their products. Superficially this seems like a good idea, but is it really? Is this the kind of thing a responsible legislative body should be acting upon when the problem is rapidly being resolved by the free market? For example, Starbucks is eliminating all transfat containing products, Burger King likewise, ditto Dunkin' Donuts. Oreo cookies no longer contain the stuff, and the worst product of all, Crisco, will soon be transfat free.

A big question is whether legislatures rightfully enter into this kind of regulation of the affairs of people. True, there is a health issue here, but there is a health issue with sodium chloride in food, caffeine, alcohol, and plenty of other things. The issue is not like alcohol which can cause inebriation, or smoking which is at least stinky and annoying to many. Except for irresponsible motorists I have yet to hear of anyone being a public nuisance by eating a fat laden doughnut.

It seems odd too that City Council in Philadelphia, the home of the greasy cheesesteak, is suddenly pious about controlling dietary transfats all the while proudly hosting the Wing Bowl gluttony contest.

### Witches and vaccines

Howard Wilk's letter referring to witches during the early days in America and the upcoming presence of Dr. Paul A. Offit, a vaccine expert, bring to mind the famous New England Puritan preacher, Cotton Mather.

Mather, in 1688 investigated the case of four children of a well respected member of his congregation who were complaining of sudden pains. He determined

that an Irish washerwoman named Mary Glover was responsible for the childrens' ills. Mary was accused of being a witch. At her trial, Mary was unable to recite *The Lord's Prayer* without blaspheming and was pronounced guilty and hanged in November of 1688. All together 19 witches were hanged until the practice was put to an end in 1693 by Governor Sir William Phipps.

After the witch-hunts died down, Mather spent many years as a prolific writer and in 1721, being somewhat scientific minded, took interest in smallpox. Mather questioned his slave, Onesimus, asking him if he ever had smallpox. Onesimus replied "Yes, and No" explaining that in his homeland, thought to be Sudan, the pus from an infected person was rubbed into a scratch on a non-infected person thus conveying immunity.

Mather convinced a local doctor to try this, and in the Boston smallpox epidemic of 1722 a much smaller percentage of thus inoculated citizens perished of that disease than did the uninoculated..

M a t h e r became an instant hero and eventually

Onesimus was freed by Mather, not for his knowledge and help in combating smallpox, but because Mather considered him to be disobedient. Mather died in 1728.



### New book debunks faith-healing claims.

Dr. Stephen Barrett's very useful Quackwatch weekly news letter reports this:

*Blind Faith: The Unholy Alliance of Religion and Medicine*, by Richard Sloan, Ph.D., looks clearly at flawed research and unsubstantiated claims that religious activities promote health. Sloan believes that religious activities promote health. Sloan believes that religion may provide comfort during difficult times, but there is no compelling evidence that prayer can cure any ailment. Sloan also states that research dollars used to investigate alleged effect of religion on health would be better spent seeking real cures based on sound science. The book can be purchased at <http://www.amazon.com/exec/obidos/ASIN/0312348819/quackwatch-20>

Dr. Barrett's website is [www.quackwatch.org](http://www.quackwatch.org). Donations are welcomed.



### Far-right activist jailed in Germany

PhACT's January speaker, Bill Ewing, a spokesman for the Philadelphia chapter of the ACLU, addressed issues of free speech in America. Here is a news item from the Philadelphia Inquirer, February 16, 2007, about free speech in Germany.

MANNHEIM, Germany - A far-right activist was convicted of incitement and sentenced yesterday to the maximum five years in prison for anti-Semitic activities, including contributing to a Web site dedicated to Holocaust denial.

Ernst Zundel was deported to his native Germany from Canada in 2005 and also has lived in Tennessee. He and his supporters have argued that he is a peaceful campaigner denied his right to free speech.

Zundel, 67, faced 14 counts of incitement for disseminating anti-Semitic propaganda through a series of pamphlets and the Web site. Denying the Holocaust is a crime in Germany and is punishable by three months to five years in prison.

Zundel's attorney, Ludwig Bock, said he would appeal.

PhACT member Al Erpel pointed out this little item:  
**Psychic museum closes due to unforeseen circumstances - Didn't see that coming**

By Lester Haines, Published Friday 9th February 2007 in The Register.

York Psychic Museum has shut due to unforeseen circumstances, the *York Press* reports. Astrologer Jonathan Cainer, who opened the museum in 2003, admitted that he'd been welcoming just 100 people a week through the doors, and had accordingly decided to temporarily hang up his crystal ball.

Cainer reckons he'll be back in business by 2008, but cautioned: "If you are asking me for predictions when exactly it will open up again, then it is hard to say. Although I'm in the prediction business, I don't believe you can make predictions about things you are close to."

### The fruitless PEAR of Princeton

The website of PEAR (Princeton Engineering Anomalies Research) has reported "At the end of February, PEAR will be concluding its experimental operations at Princeton University. After more than a quarter century of systematic empirical study of consciousness-related physical phenomena, it is our sense that many of the salient correlates of these intriguing anomalies have now been identified. There are many important questions still to be addressed, but these will require an even broader interdisciplinary approach to the topic. Therefore, we will be shifting our base of operations to the International Consciousness Research Laboratories, a 501(c)(3) non-profit organization."

So, many of the salient correlates of intriguing anomalies have been identified, have they? Very interesting. Please, someone, fill us in about these fascinating scientific findings, and if the research is so successful then why are the doors closing? The pears must be sour anyway.

And it seems that the cranky editor of this newsletter is not a lonely voice in saying good riddance:. Check out this from the New York Times, February 10, 2007.

"It has been an embarrassment to science, and I think an

embarrassment for Princeton" Robert Park, physicist, on the closure of Princeton's Engineering Anomalies Research program, which for 28 years has tried to demonstrate that human thoughts can affect machine behavior."

### Ian Stevenson Dies at 88

Ian Stevenson, an academic psychiatrist who 45 years ago abandoned Freud as too unscientific and turned to the paranormal as a tool with which to plumb the human psyche, died on Feb. 8 in Charlottesville, Va.



The ghost you're trying to reach is currently unavailable.  
 Please leave a message after the beep.

**“I have been born more times than anybody except Krishna.” - Mark Twain**

Stevenson was without doubt the intellectual leader of American Reincarnationists.

Spurned by most academic scientists, Dr. Stevenson was to his supporters a misunderstood genius, bravely pushing the boundaries of science. To his detractors, he was earnest, dogged but ultimately misguided, led astray by gullibility, wishful thinking and a tendency to see science where others saw superstition.

**Reincarnate In Peace**

**Daily Mail**  
24 HOURS A DAY

**Psychics 'hired to find Bin Laden'** declared the British Ministry of Defense, 23 February, 2007.

“Psychics were recruited by the Ministry of Defence to locate Osama Bin Laden's secret lair, it was claimed yesterday.

Newly declassified documents revealed that the MoD conducted an experiment to see if volunteers could 'see' objects hidden inside an envelope.”

It is good to know that the allies are keeping on top of things.

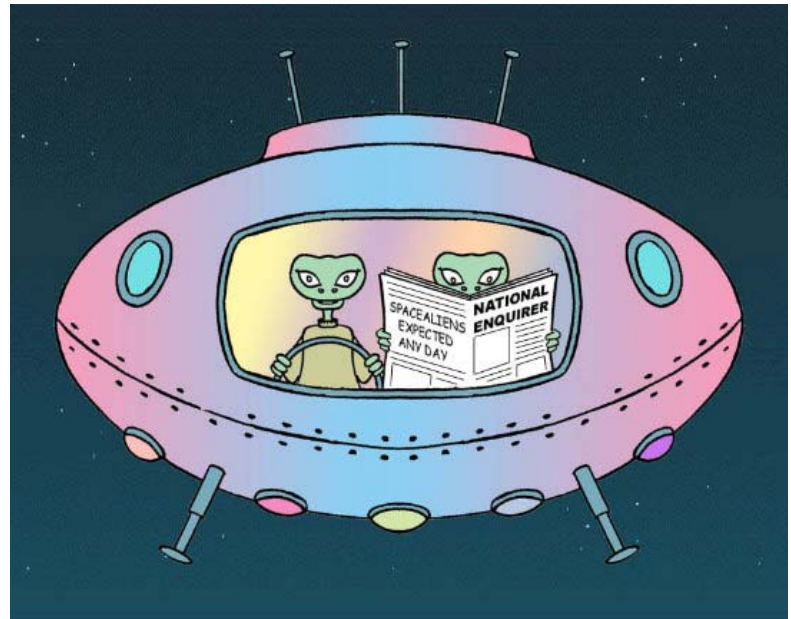
## **UFO science key to halting climate change: former Canadian defense minister**

Wed Feb 28, OTTAWA (AFP) - A former Canadian defense minister is demanding governments worldwide disclose and use secret alien technologies obtained in alleged UFO crashes to stem climate change, a local paper said Wednesday.

"I would like to see what (alien) technology there might be that could eliminate the burning of fossil fuels within a generation ... that could be a way to save our planet," Paul Hellyer, 83, told the Ottawa Citizen.

Alien spacecrafts would have traveled vast distances to reach Earth, and so must be equipped with advanced propulsion systems or used exceptional fuels, he told the newspaper.

Such alien technologies could offer humanity



**WELL DANG...THERE GOES THE SURPRISE**

alternatives to fossil fuels, he said, pointing to the enigmatic 1947 incident in Roswell, New Mexico -- which has become a shrine for UFO believers -- as an example of alien contact.

"We need to persuade governments to come clean on what they know. Some of us suspect they know quite a lot, and it might be enough to save our planet if applied quickly enough," he said.

Hellyer became defense minister in former prime minister Lester Pearson's cabinet in 1963, and oversaw the controversial integration and unification of Canada's army, air force and navy into the Canadian Forces.

He shocked Canadians in September 2005 by announcing he once saw a UFO.

## **Defusing Global Warming - Gasoline vs Ethanol**

At the February meeting about Global Warming with climatologist Dr. Tom Delworth a question arose about the advantages of substituting ethanol for gasoline. Dr. David Cragin, a toxicologist, stated that burning a gallon of gasoline will cause 20 pounds of carbon dioxide to be injected into earths atmosphere. To a non chemist like the editor of this newsletter this might seem preposterous. But it isn't.

In subsequent e-mail communications Dr. Cragin explains in relatively simple language.



“Comparing the energy content of hydrocarbons is relatively easy: energy is released when the carbon is oxidized (i.e., burned). The addition of oxygen to a hydrocarbon reduces its energy content in direct relation to the compound's molecular weight. Methanol is 50% oxygen by weight and has roughly 50% of the energy content of a non-oxygenated hydrocarbon. Ethanol is 33% oxygen by weight and has 67% of the energy content. Hence, to replace the energy content of gasoline, you need 1.5 gallons of ethanol. (you actually need more than this because ethanol sold for fuel use typically has 6% water, which has no energy value).

Per gallon burned, ethanol creates 33% less CO<sub>2</sub>, but also puts out 33% less energy. The upshot: CO<sub>2</sub>/unit of energy is the same for oxygenated and non-oxygenated hydrocarbons (there is no free lunch).

The result is that an American car that drives the average 14K miles/year and gets 25 mpg puts out almost 11,000 lbs of CO<sub>2</sub>. When burned, natural gas, wood, & coal similarly emit much more than their weight in CO<sub>2</sub>.

Weight of gasoline = 6.3361 lbs./gal

Gasoline is C<sub>4</sub> - C<sub>12</sub> hydrocarbons

Assume average C<sub>8</sub> [octane - (H<sub>3</sub>C)<sub>2</sub>CHCH<sub>2</sub>CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>]

C<sub>8</sub>H<sub>18</sub> Molecular Weight = 114.22 g

C = 12.011 g/mole O<sub>2</sub> = 31.9988 g/mole

% Carbon = MW carbon / 114 g = 8 X 12.011 / 114.22 = 84.13%

Therefore, 6.3361 lbs of gasoline has 5.3306 lbs carbon, 1.0055 lbs. H<sub>2</sub>

Each carbon combines with 2 Oxygens

31.9988/12.011 x 5.3306 lbs carbon = 14.2013 lbs O<sub>2</sub>

Therefore, 1 gallon of gasoline burned:

14.2013 lbs O<sub>2</sub> + 5.3306 lbs carbon = 19.53 lbs. of CO<sub>2</sub>  
plus 1 lbs. H<sub>2</sub> + 8 lbs O = 9 lbs water.

This calculation does nothing to prove or disprove that manmade carbon dioxide emissions cause global warming, but it certainly is a powerful indicator that switching fuel from gasoline to ethanol is not a realistic way to reduce carbon emissions. There may be other advantages to such a change, but reduced CO<sub>2</sub> in the atmosphere is apparently not one of them.

Thank you for the calculations and explanation,  
Dave.

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## Scientists Confront Intelligent Design and Creationism

Andrew J. Petto and Laurie R. Godfrey, editors

**From leading scientists, lawyers, and educators, 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 ID proponents like Phillip Johnson,



“What a find, Ms. Dinkins! ... It's Mailman, all right—but remarkably, this specimen is fully intact, with the *Canus nipponicus* still attached.”

Michael Behe, and William Dembski. The sixteen 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 our public and scientific institutions.

The book includes powerful voices in the modern culture war against ID, including Kevin Padian, paleontologist and expert witness in the landmark lawsuit of *Kitzmiller v. Dover*. With creationist arguments forever morphing and reappearing under new aliases, this new confrontation is a must-read for teachers, students, and general readers, and a ringing and lasting refutation of creationism's fraudulent claims.

**Andrew J. Petto** is the editor of *Reports* of the National Center for Science Education in Oakland, California, and lecturer in anatomy and physiology at the University of Wisconsin-Milwaukee.

**Laurie R. Godfrey** is professor of anthropology at the University of Massachusetts-Amherst, and the editor of the first edition of *Scientists Confront Creationism*.

**Laurie R. Godfrey** is professor of anthropology at the University of Massachusetts-Amherst, and the editor of the first edition of *Scientists Confront Creationism*.

## Gentle Wind Project (GWP) Morphs to "Family Systems Research Group (FSRG)"

by Jim Bergin and Judy Garvey

Typical of cultic groups when exposed, in GWP's case by the Maine Attorney General, the leaders will change stripes – in name or location – and pitch, to maintain control over followers, attract new recruits, and keep the money flowing.

Now we have a "new" organization called Family Systems Research Group, described in their publicity as "pick[ing] up where GWP technology leaves off...."; seemingly consisting of the same cast of characters who signed the AG's Consent Decree. Little has changed – beyond the defensive disclaimers and sales now based on price instead of "donations" in the marketing of their wares. (On the last page of the FSRG description, however, we learn that a portion of each fee goes directly to the work of GWP....) Surprisingly, they are still calling themselves "researchers."

They still have "healing instruments" (now called "I Ching alignment instruments," selling for \$365 to \$6,260); "telepathic healings" (now "distant alignments"); and offer "phone consultations [that] ... may have a transformational effect...." The "consultations" seem to harken back to the "soul readings" GWP promoted in the early 80s (which they claimed to channel exclusively from "the spirit world").

And, amazingly, hair samples and astrology (now "behavioral astronomy" and "hexagram profiles") are back – which is where GWP's "Tubby" Miller and "Moe" Miller (then Claudia Panuthos AKA Mary Elizabeth Carreiro) and Tubby's five female housemates, at that time, first began. Oddly, another GWP dinosaur has been resuscitated – transactional analysis.

You can download the "astrology" program used by FSRG for \$400, and run it on your home computer indefinitely, plugging in each client's date and time of birth, etc. See <http://www.aureas.com/> – the URL on FSRG's charts. Nevertheless, the shrewd people at FSRG sell charts to each client starting at \$250 for

"phase 1" and offer 3 phases for a total of \$700.) The authors of FSRG's description are identified by the term, "WE." Thus, former followers of GWP assume that "Tubby" and "Moe" continue to think they're speaking for "the spirits."

These approaches worked successfully for the Millers in the past, yielding GWP's "nonprofit" millions of dollars (see GWP IRS Form 990s on <http://www.windofchanges.org/>), so here we go again. As they say in the world of recovery, "Insanity is doing the same thing over and over again expecting different results." Some of us have learned that lesson.

GWP / FSRG Address Update: According to the

newest website for the Millers' GWP, <http://www.gentlewindproject.org/>, their address is now in Starks, NV. However, Family Systems Research Group's sales material lists an address in Portsmouth, NH (no website available) at the same mail-drop location used by the Millers during their failed Federal and State lawsuits against Jim Bergin, Judy Garvey, Rick Ross, Ian Mander, Steve Gamble, Ivan Fraser, and Steve Hassan. The Maine AG's Consent Decree prohibits GWP from operating in Maine, and the GWP leaders from ever running another

Maine nonprofit. However, GWP (as Gentle Wind Retreat) is listed as a nonprofit just across the river in the state of New Hampshire.

Editor's notes: Jim Bergin and Judy Garvey are former members of the Gentle Wind Project. This story is fully documented at the Bergin/Garvey website: <http://www.windofchanges.org/>. The Gentle Wind Project made much of its money by selling "healing cards" and "healing pucks". The Family Systems Research Group is selling "I Ching Alignment Instruments". Get a load of this from FSRG literature:

### "The I Ching Alignment Instruments

The I-Ching Alignment Instruments are a derivative of many old and known disciplines aimed at improving the human condition. Utilizing the principles of Tibetan medicine as well as other technologies and our understanding of the energetic nature of the human systems, FSRG has developed a new technology aimed at balancing and aligning the human consciousness. The instruments come in the form of framed symbol sets



Illustrated here is a Gentle Wind Project "Healing Card" meant to be held between the hands as if praying. The effect is to correct energy flows and balances. Cost: about \$250

that employ updated, rebuilt and energetically enhanced I-Ching Hexagrams, herb and vitamin charges, minerals, copper and aluminum shielded magnetic structures and other natural substances utilized for their energetic properties. The instruments include the I-Ching Alignment System 1 Instrument (12" X 18" framed symbol set); I-Ching Alignment System 2 Instrument (17" X 21"); the I-Ching Alignment Systems 3 & 4 Professional Package (18" X 22" with herbal charged, heavily shielded magnetic structures). Only Systems 3 and 4 use charged magnetic structures.

NOTE: To comply with existing regulatory authorities, FSRG makes no claims or promises regarding the effectiveness of the technology. The instruments are not FDA approved. They are not intended to diagnose, treat or cure any condition. Each comes with a 30-day money back guarantee. “

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## Strange Places - The Secret Cloud Buster of Pennington, NJ By Eric Krieg

In 2005, my friend Gus and I worked in Mercer County NJ and were doing a pure cross country run from Rosedale park located in Pennington. We went to the outlet side of the lake and decided to follow the watershed downstream. After about a mile of following the south side of the main stream bank eastward, we stumbled upon one of the more strange things we've found in hundreds of miles of exploration: A solar powered orgone cloud buster.

While trying to figure out what was meant to do what, Gus half joked that some religious cult may see fit to sacrifice us to their god to atone for our defiling a sacred site with our skeptical presence. I ended up having to show him a picture of a cloud buster from the web to convince him the device was first part of pseudo science than just a cult artifact [but good for him for expecting proof before believing me]. A cloud buster is a crackpot device invented 80 years ago by a wacked out student of Freud, Wilhelm Reich. Reich who died in prison (according to followers, for challenging the science establishment) before starting up a whole cult (still surviving to this day).

Reich told followers there was some magical

power in the orgasm and that related “orgone energy” could be channeled and stored to actually affect weather.

The design is a series of tubes pointed skyward. In this case, the whole 24' high apparatus is camouflaged and on a military surplus trailer/pedestal jacked up on blocks, camo-painted hoses go down to the river (I guess to ground negative energy). Solar panels with flashing blue LEDs and cables leading to locked electrical boxes mean that this design is one of the new splinter orgonomy faction designs that probably incorporates other crack pot theories of Nicola Tesla.

As Reich's crazy rants progressed, he and followers were convinced they could modify weather by pointing tubes at the sky that somehow shot orgone into the heavens. Since then, many orgonomists have seized upon the mad scientist rant of "fools, don't they realize

what powers they are dealing with" [you have to picture that line exclaimed by a red faced frothing nut in a lonely lab] - they declare that such experiments can cause hurricanes of biblical proportions [insert insane evil laughter here].



Reich and his cloud buster

It is uncanny that I of all people stumble onto this device as I have the only real skeptics' web page debunking this kind of nonsense found at [www.phact.org/e/orgonomy.htm](http://www.phact.org/e/orgonomy.htm) I had set

up a yahoo groups email list on orgonomy, but I believe cult followers must have had it shut down. I did find that “The American College of Orgonomy” is located in Princeton a few miles away.

On a later visit to the area, I noticed the device had been re-aimed. I imagine the owner must declare himself personally responsible for every strange change in weather in the area.

*Eric Krieg is President of PhACT and is an avid detective and de-bunker of pseudo-science claims.*



## Global Warming Fears — Scientific or Manic? by Joel M. Kauffman, Ph.D.

The hypothesis for the past 20 years starts with the fact that humans have been emitting more and more carbon dioxide (CO<sub>2</sub>). The CO<sub>2</sub> supposedly absorbs infrared radiation from the surface of the Earth, heating up and somehow making the surface temperatures on the Earth warmer. The “Warmers” contend that runaway heating will cause floods, sea-level increases, storms and droughts, and, to avoid all that, we must stop emitting CO<sub>2</sub> or find a way to sequester it. Warmers ignore the much more major infrared absorber water vapor, or even after mentioning it, leave it out of tables showing how much each “greenhouse gas” changes temperatures. Warmers claim that climate modeling correctly predicted the warming of the last 20 years, and claim that the 1990s were the hottest period the Earth has seen in the past 1000 years, or as some say, that 2006 was. The temperature graph used by Warmers

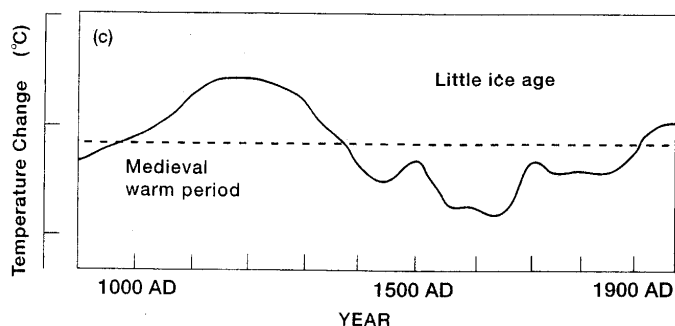


Figure 1. The Last 1,000 Years of Earth Temperatures from Tree Rings, Ice Cores, and Thermometers.

(Figure 22 in the IPCC's *Climate Change*, 1995.)

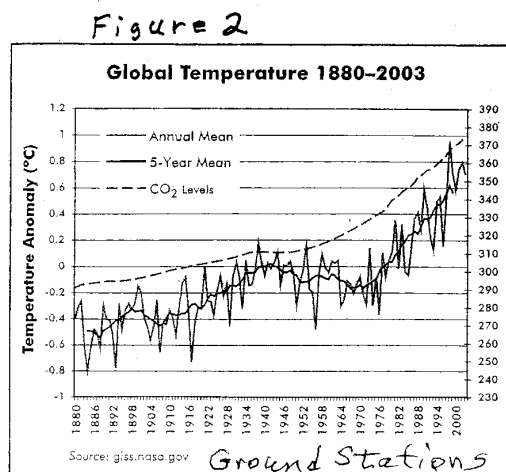
Singer SF, Avery DT, *Unstoppable Global Warming: Every 1500 Years*, 2006, p68.

(often called the “hockey stick”) has a gradual fall in temperatures from 1000 AD to about 1850, then a huge leap until the present. Warmers claim that changes in solar output have negligible effects, and that volcanic eruptions explain certain long cooling periods, which may be true of the really big eruptions.

So the first fact that must be settled is what temperatures actually were before thermometers, and how thermometer readings are biased. The 1999 hockey stick graph by Michael E. Mann showing temperatures for the last 1000 years was based mostly on tree-ring measurements, but selected data were left out, the effect of more CO<sub>2</sub> and rain on tree growth was ignored, and there was computerized manipulation of the graph to

achieve a desired result. Two Canadians, Chris Essex & Ross McKittrick, asked for raw data from Mann, which was provided incompletely and grudgingly, and they were able to reproduce Mann's graph partially from the output of a random number generator. They informed the Editor of *Nature*, where Mann had published, who demanded a “correction of error”, which appeared in the 1 Jul 04 issue. (Singer & Avery, 2006, pp68-71; Michaels, 2004, pp1-49; Essex & McKittrick, 2002, pp154-174). Thus the most believable temperatures are shown in Fig. 1, in which the current warm period was preceded by the “little ice age” from 1450-1850, and this was preceded by the “medieval warm period” from 900-1400 AD, which was warmer than now, despite much lower CO<sub>2</sub> concentrations. This was a composite of several temperature measurements and proxies, and the medieval warm period was found in more than 70 separate published studies (Soon & Baliunas, 2003).

More recent temperatures used by Warmers include measurements at ground stations, as shown in Fig. 2, many of which became more urbanized and subject to heat island effects not shared globally. Many in Siberia were abandoned with the fall of the Soviet Union (Horner, 2007). Note that there was a 30-year drop in



temperatures from 1940-1970 in an era when CO<sub>2</sub> concentrations were rising fast. Blaming this drop on volcano dust was a ruse, since recent coolings from volcano dust in the air last 1-3 years, not 30. Also, when the 1970-2000 temperatures are corrected for heat island effects, the slope of the line is the same as that from 1910-1940. Note that there was an equal increase in near-surface temperatures despite more CO<sub>2</sub> in the later period. The Warmers also neglect to mention, after noting that 1998 was the warmest year of the last many

years, that all years since to 2006 have been cooler than 1998 in the face of rising CO2 concentrations using surface temperatures. The Warmers also dismiss the contribution of solar output variation (Fig. 3), which has a direct effect noted in 1801 by Sir William Herschel in

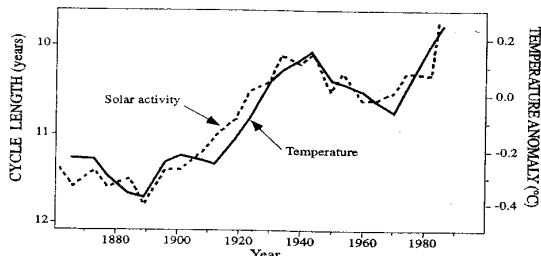


Fig. 3. Solar activity, in terms of sunspot cycle length (broken line), shows a strong correlation with global temperatures (solid line) [Friis-Christensen and Lassen 1991, reprinted with permission, © American Association for the Advancement of Science]. The authors extended the correlation back to 1500 by using proxy data [Lassen and Friis-Christensen 1995].

From Singer, 1999, p7.

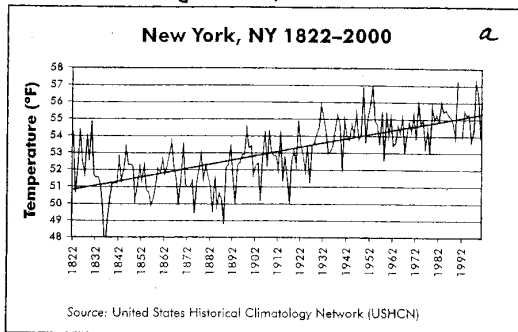
London and verified since, and an indirect effect of altering the amount of cosmic ray hits in the atmosphere, which seed cloud formation and cool the Earth (Singer, 1999, p7; Singer & Avery, 2006, pp193-9).

Climate models by the Intergovernmental Panel on Climate Change (IPCC) have always failed to model cloud formation and its effects accurately. Not knowing whom to believe 10 years ago, I determined an infrared spectrum of humid air in Philadelphia, PA, finding that 92% of the absorption was due to water vapor, 8% to

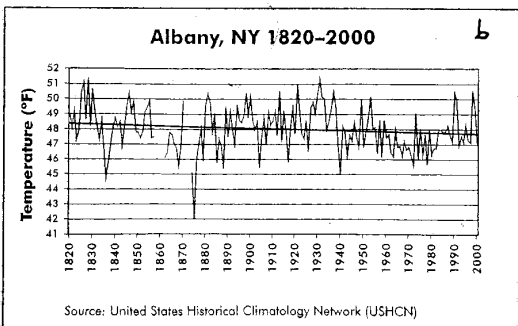
CO2, and none to methane (Kauffman, 2004). Water vapor is responsible for about 60% of the natural greenhouse effect worldwide, and CO2 is responsible for an estimated 20% (Singer & Avery, 2006, p40).

Because Warmers seek to deceive by using temperatures boosted by heat island effects, it is worthwhile spending some time on their magnitude. From 1822-2000 New York City warmed by 4°F (Fig. 4a), while Albany, NY cooled off slightly in the same period (Fig. 4b), as did Punta Arenas, Argentina, and many other places; so the NYC warming was hardly global. Warming trends in California counties by population show no warming from 1910-1995 for the least populated counties, 1°F warming for more populated counties, and what Warmers would call a catastrophic warming of 4° F for the most populated counties (Fig. 5), (Singer, 1999, p13). Did this predict the record freezing cold in CA in 2007? Predictions of warming made by modeling around 1990 were 3 times higher than the observed values in the past few years.

Figure 4



Source: United States Historical Climatology Network (USHCN)



Source: United States Historical Climatology Network (USHCN)

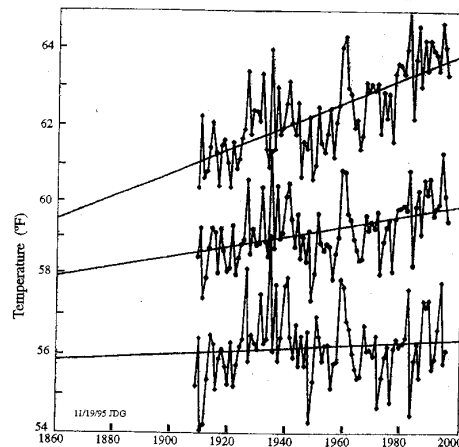


Fig. 5. Warming trends since 1910, as observed by California stations. The top curve is for counties with populations between 0.1 and 1 million, the middle curve is for populations between 0.1 and 1 million, and the bottom curve for counties with less than 0.1 million inhabitants. Note the increased warming trend for populous counties, indicating an urban heat island effect [Goodridge 1996]. From Singer, 1999, p13.

Finally, Warmers do not present the atmospheric temperatures available from weather balloons for 50 years, which agree very well with those from weather satellites from 1979-2001 (Fig. 6). There is no trend at all since weather satellite data began in 1979. An 0.6°C peak in 1998 did not last and was compensated by an 0.6°C dip in 1985. Since the CO2 is in the air, nicely fertilizing plants, its absorption of infrared radiation should warm it up, by definition. Gases mix well and the atmosphere should have heated up according to the Warmers' main hypothesis, then the warmer air might

have warmed up the Earth's surface. As you can see, nothing of the sort happened. (Essex & McKittrick, 2002, p134). Hypothesis is dead.

Or almost dead, according to Prof. Richard K. Lindzen of MIT, who says climate models vastly overestimate temperature changes resulting from increases in CO<sub>2</sub>. All other things being equal, Lindzen says a doubling of CO<sub>2</sub> should result in a global mean warming of just 1°C. "Alarming predictions all require that water vapor and clouds act so as to greatly amplify the impact of CO<sub>2</sub>, ...but it is freely acknowledged, including by the IPCC, that water vapor and especially clouds are poorly modeled, while the underlying physics for determining their behavior is missing or even unknown."

Warmers also claim a consensus that their hy-

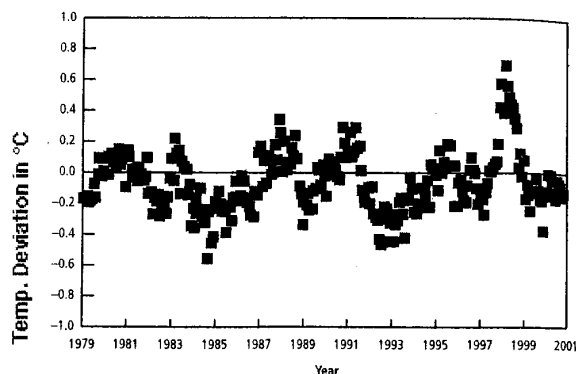


Figure 6. Tropospheric Temperatures Measured by Weather Satellites, 1979-2001. From Essex & McKittrick, 2002, p134.

pothesis is valid, and marginalize those who do not agree, the latest vilification being that global warming denial is in the same class as Holocaust denial. In 1992, about 100 scientists in the American Meteorological Society opposed controls on "greenhouse" gas emissions. In 1992, 4000 scientists supported the skeptical Heidelberg Appeal. In 1996, of 400 climate researchers, only 10% agreed with the CO<sub>2</sub>-warming hypothesis, and half had no faith in the climate models. In 1997, 45 of the 50 US State Climatologists thought climate changes were natural and cyclical. Now some are being fired or pressured into accepting the Warmers' dogma. In 1998, more than 17,000 scientists and engineers, 2600 with climate credentials, rejected the Warmers' dogma (Singer & Avery, 2006, pp65-6). Other surveys claiming the opposite have used non-scientists who cannot understand the data presented above.

Hang onto your wallet, which is one of the main targets of global warming mania.

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Joel M. Kauffman, Ph.D. is Professor Emeritus in Organic Chemistry and is a long time member of PhACT. Dr. Kauffman is author of several books and dozens of scientific articles including this catchy title "Diaryl amino Groups as Photostable Auxofluors in a 2-Benzoxazolyfluorene, 2,5-Diphenyloxazoles, 1,3,5-Hexatrienes and 2,7-Distyrylfluorenes". It makes you want to sing.

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### Phactum Troubles

The February 2007 Phactum was delivered in a timely manner to the US Postal Service Paper Shredding Department. A large, but unknown percentage of mailed copies were badly damaged or missing altogether. One copy was returned in mangled condition, recipient unknown. If you did not receive your copy in readable condition we will send another. Email: [phactpublicity@aol.com](mailto:phactpublicity@aol.com) and we will try again.



**ABOUT SAINT PATRICK** - Saint Patrick is believed to have been born in the late fourth century, and is often confused with Palladius, a bishop who was sent by Pope Celestine in 431 to be the first bishop to the Irish believers in Christ.

Saint Patrick was the patron saint and national apostle of Ireland who is credited with bringing Christianity to Ireland. Most of what is known about him comes from his two works, the *Confessio*, a spiritual autobiography, and his *Epistola*, a denunciation of British mistreatment of Irish Christians. Saint Patrick described himself as a "most humble-minded man, pouring forth a continuous paean of thanks to his Maker for having chosen him as the instrument whereby multitudes who had worshipped idols and unclean things had become the people of God."



Saint Patrick is most known for driving the snakes from Ireland. It is true there are no snakes in Ireland, but there probably never have been - the island was separated from the rest of the continent at the end of the Ice Age. As in many old pagan religions, serpent symbols were common and often worshipped. Driving the snakes from Ireland was probably symbolic of putting an end to that pagan practice. While not the first to bring Christianity to Ireland, it is Patrick who is said to have encountered the Druids at Tara and abolished their pagan rites. The story holds that he converted the warrior chiefs and princes, baptizing them and thousands of their subjects in the "Holy Wells" that still bear this name.

There are several accounts of Saint Patrick's death. One says that Patrick died at Saul, Downpatrick, Ireland, on March 17, 460 A.D. His jawbone was preserved in a silver shrine and was often requested in times of childbirth, epileptic fits, and as a preservative against the "evil eye." Another account says that St. Patrick ended his days at Glastonbury, England and was buried there. The Chapel of St. Patrick still exists as part of Glastonbury Abbey. Today, many Catholic places of worship all around the world are named after St. Patrick, including cathedrals in New York and Dublin city.

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. I have enclosed a check payable to **PhACT**.

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*Illustration from first edition of EVE'S DIARY*

By Mark Twain

As for the dinosaur--But Noah's conscience was easy; it was not named in his cargo list and he and the boys were not aware that there was such a creature. He said he could not blame himself for not knowing about the dinosaur, because it was an American animal, and America had not then been discovered.

- "Adam's Soliloquy"

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