

# Phactum

The Newsletter of the Philadelphia Association for Critical Thinking  
November 2007

editor: Ray Haupt

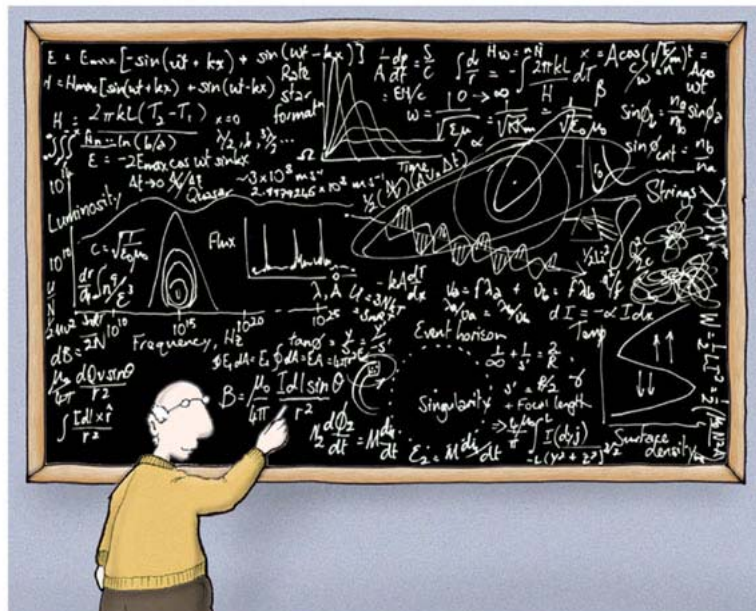
www.phact.org

**PhACT Meeting—November 17, 2007**

**Hosted by the Physics Department, Community College of Philadelphia**

**- Everything's Relative and Other Fables in Science and Technology**

Tony Rothman is a cosmologist who studies the Big Bang and related events. He is interested in extremal black holes, black holes on the verge of becoming naked singularities, as well as on the detection of gravitons. His father was Milton Rothman, who helped PhACT get started 11 years ago and also wrote much on Physics. Tony will speak on his



Astrophysics made simple

latest book, **“Everything's Relative and Other Fables in Science and Technology”**. This book takes a closer look and corrects much common knowledge about key historical moments in science and technology and corrects myths. Tony is a professor of Physics at Princeton University.. See Page 4 for a description of Tony's book.

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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

The **Physics Department of Community College of Philadelphia** hosts meetings of **PhACT** - at 2:00 PM, 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.**

## **November 17, 2007 - Everything's Relative and Other Fables in Science and Technology**

Tony Rothman is a cosmologist who studies the Big Bang and related events. He is interested in extremal black holes, black holes on the verge of becoming naked singularities, as well as on the detection of gravitons. His father was Milton Rothman, who helped PhACT get started 11 years ago and also wrote much on Physics. Tony will speak on his latest book, "Everything's Relative and Other Fables in Science and Technology". This book takes a closer look and corrects much common knowledge about key historical moments in science and technology and corrects myths. Tony is a professor of Physics at Princeton University..

**Friday, December 21, 2007 - Phact Annual Winter Solstice Party.** This event is free but is for members only. Location and other details will be available to members at a later date.

**January 19<sup>th</sup> 2008 - Paul A. Offit, M.D.,** chief of infectious diseases at the Children's Hospital of Philadelphia and the Henle Professor of Immunologic and Infectious Diseases at the University of Pennsylvania School of Medicine will discuss **Vaccine Safety: Science Politics and the Media.** Dr. Offit is an internationally recognized expert in the fields of immunology and virology.

**Friday, November 9, 2007—Delaware Valley Mensa.** Monthly Meetings are always open to family, friends, interested others and the public. See the "Events Calendar" on the Mensa website for more information. After the meeting we will adjourn to a local restaurant for some inexpensive food and conversation. The website is <http://dvm.us.mensa.org/>. See page 9 for more information about this event.

**November 8 to 11, 2007. Lecture: Light and Enlightenment.** Join Metanexus Institute in partnership with Main Line Reform Temple of Wynnewood and Villanova University - November 8-11 - for Light and Enlightenment: Critical Issues in Rabbinic Judaism and Modern Science. Renowned Jewish philosopher and rabbi, Norbert M. Samuelson, will use the theme of "Light and Enlightenment" to interconnect what both the sciences and Judaism have to say about the future of humanity and our universe.

- November 8 at 6:30pm, Tolentine Hall, Rm. 215, Villanova University
- November 9-11, Main Line Reform Temple, Wynnewood, PA (Fri at 8pm\*, Sat & Sun at 9am)

All talks are free and open to the public. Refreshments will be served. To learn more or contact us: [info@metanexus.net](mailto:info@metanexus.net) or (484) 592-0304.

**Tuesday November 27, 2007 at 5 PM. Lecture: Desperate Etruscan Housewives. 5 PM at University of Pennsylvania Museum of Archaeology and Anthropology.** Dr. Jean Turfa, Research Associate, Mediterranean Section. Did desperate Etrus-

can housewives cause the collapse of a whole civilization? In 264 BC, a Roman army "liberated" the rich Etruscan city of Volsinii (modern Orvieto) from a band of freed slaves who had taken over the government, imprisoned the men and forcibly married the wives and daughters of their old masters. Of course, instead of restoring the city to its aristocratic owners, the Romans evicted them from their stronghold and leveled it, marking the beginning of the end of the Etruscans' luxurious society. Etruscan (house)wives already had a reputation for wild orgies, cavorting with troops of handsome slaves, and headstrong independence -- but this time, did their antics with the pool-boys, gardeners and personal trainers actually destroy this luxurious culture that had thrived for almost a thousand years? Rainey Auditorium talk, followed by gallery tour and refreshments. Free.

**December 3, 2007 at 6:00 PM. The Philadelphia College of Physicians** co-sponsored with The Philadelphia Academy of Surgery. **Regenerative Medicine and New Approaches to Healthcare in the 21st Century, Anthony Atala, MD,** W.H. Boyce Professor and Director, Wake Forest Institute for Regenerative Medicine and Chair, Department of Urology, Wake Forest University School of Medicine. Subscription Cocktail Buffet, 6:00 p.m., fees apply; Program 6:45 p.m.; dessert buffet follows program. To register for the program only, download registration form or register online. This event will be at the **Mutter Museum**, 19 South 22nd Street, Philadelphia PA 19103. The lectures is free but pre-registration is required. Office Hours: Monday - Friday, 9am-5pm (215) 563-3737 x211

# PHACT CALENDAR

**Calling All Astronomers! Rittenhouse Astronomical Society Monthly Meetings! Bring all of your out-of-this-world questions!** Join **The Rittenhouse Astronomical Society** the second Wednesday of each month at 7:30 p.m. in the Fels Planetarium in the Franklin Institute of Science. The society offers all persons an opportunity to participate in the activities of an astronomical group at the laymen's level. They aim to spread knowledge, awareness and enjoyment of astronomy and astronomical issues. It is a popular science club that keeps its members up-to-date on the latest developments. No experience is necessary to attend the **FREE** meetings. Come with your astronomy questions!  
Website: [www.rittenhouseastronomicalsociety.org/](http://www.rittenhouseastronomicalsociety.org/)  
2007 Dates: November 14, December 12

**Freethought Society of Greater Philadelphia (FSGP)** and the **Humanist Association of Greater Philadelphia (HAGP)** co-sponsor a monthly book discussion club. The book club meets on the third Saturday of each month at 7:00 PM at Willow Grove Barnes & Noble, 102 Park Avenue, Willow Grove, Pennsylvania 19090. If you have any questions, please contact the book club moderator, Ian Thomas. Email: [ian.thomas101@gmail.com](mailto:ian.thomas101@gmail.com)  
Phone: (610) 368-5915 Cell: (610) 565-4530.

**Philadelphia Brights Meetup Group.** Meetings are held at the Barnes & Noble Cafe at 1805 Walnut Street, at 7pm on the second Monday of the month.

**Thursday, November 15, 4:00-8:30 pm** at the Academy of Natural Sciences at the corner of 19th Street and the Benjamin Franklin Parkway in Philadelphia. **Sustainable Visions: Strategies for Philadelphia.** This is special, two-part Town Square program featuring the finalist from an international design ideas competition and an Urban Sustainability Forum. From 4:00-6:00 pm, the five finalist teams from the international ideas competition, **Urban Voids: Grounds for Change** will present on their submissions. The teams are: Ecosistema Urbano (Madrid), Front Studio (New York), Jill Desimini (Boston), Mathew Langen (Boston), and grand winner Waterwork (the Philadelphia team of Charles Loomis, Chariss McAfee, Gavin Riggall and Juliet Geldi). (See [www.landvisions.org](http://www.landvisions.org) for more information.) From 6:00-8:30 pm, an **Urban Sustainability Forum** will look at opportunities and challenges cities face when bridging the gaps between design and implementation. The discussion will explore the value of innovative design as well as the policy implications that would enable those visions to be successfully realized. The panelists include **Paul Brophy** (principal with Brophy & Reilly) and **Raymond Gastil** (Director of City Planning, Manhattan). The Urban Voids finalists will also take part in the evening panel.

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.

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

**Saturday, November 10, 2007, Family Open House**  
**"Natural History Road Show"**

Bring your rocks, minerals, plants, shells, and insects to the Institute!! Expert scientists from Philadelphia put on their thinking caps and provide answers for any and all questions you may have regarding your natural history treasures. No live animals allowed in the Institute. Museum open from 12 - 4 PM. Presentation at 1 PM, Q&A from 2 - 4 PM Museum admission is free. A donation of \$8 is suggested for ages 12 and up.

**Wednesday, November 14, 2007, Weeknights at the Wagner, 4-7 PM, Lecture at 5:30 PM**

**"AESTHETICS AND ATTITUDES IN THE GOLDEN AGE OF NATURAL SCIENCE ILLUSTRATION"**  
**An illustrated presentation by Scott Rawlins**

Early exploration of the continental United States coincided with an increased interest in recording the natural world through detailed drawings and paintings. Indeed, illustrations were necessary to properly document newly described species.

This lecture will examine the aesthetics, techniques and applications of 18<sup>th</sup> and 19<sup>th</sup> century natural science illustration through the work of various prominent (and not-so prominent) artists/naturalists who lived and worked on both sides of the Atlantic. Artists to be discussed include John James Audubon, Beatrix Potter, and Maria Sibylla Merian, among others.

A well-respected science illustrator, Scott Rawlins, is Associate Professor in the Fine Arts Department at Arcadia University in Glenside, PA where he teaches scientific illustration, drawing and design. His freelance clients have included the American Museum of Natural History in New York, the National Museum of Natural History in Washington, D.C., and the Academy of Natural Sciences in Philadelphia.

A corresponding exhibit, *The Scientific Image: Illustration from the Age of Enlightenment to the Victorian Age*, will be on view in the Reference Library from November 12 - December 28, 2007.

Museum admission is free. A donation of \$8 is suggested for ages 12 and up.

*The Institute's free public education courses in science are in their 152nd year, making them the oldest program devoted to free adult education in the United States. The Institute also has a strong commitment to children's education. It offers a range of programs for visiting school groups, and cultivates special partnerships with neighboring inner-city schools.*

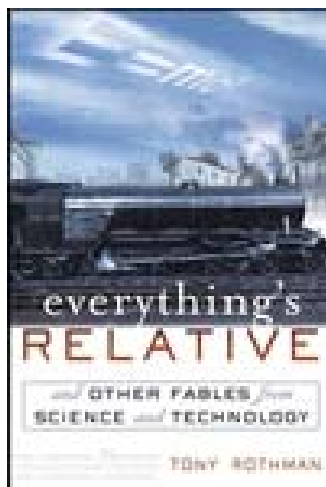
## Everything's Relative: And Other Fables from Science and Technology

By Tony Rothman

ISBN: 978-0-471-20257-8

Hardcover, 272 pages, Wiley-VCH

September 2003, US \$24.95



The surprising truth behind many of the most cherished "facts" in science history. Morse invented the telegraph, Bell the telephone, Edison the light bulb, and Marconi the radio ... right? Well ... the truth is slightly more complicated. The history of science and technology is riddled with apocrypha, inaccuracies, and falsehoods, and physicist Tony Rothman has taken it upon himself to throw a monkey wrench into the works. Combining a storyteller's gifts with a scientist's focus and hardheaded devotion to the facts—such as they may be—Rothman breaks down many of the most famous "just-so" stories of physics, astronomy, chemistry, biology, and technology to give credit where credit is truly due. From Einstein's possible misunderstanding of his own theories to actress Hedy Lemarr's role in the invention of the radio-controlled torpedo, he dredges his way through the legends of science history in relating the fascinating stories behind some of the most important, and often unsung, breakthroughs in science.

Tony Rothman, PhD had taught at Bryn Mawr College and is now a researcher and lecturer at Princeton University. He is the author of seven other critically acclaimed science books and a frequent contributor to leading science publications, including Scientific American and Discover.

## Letters and Articles Wanted For Phactum

Phactum is the club newsletter of PhACT and members and non-members are invited to submit letters and articles for publication in Phactum. If something is on your mind that might interest a bunch of skeptics then by all means write it down and send it to the editor. The range of topics is as huge as your imagination and contrarian views are welcome. Please, no partisan politics and no heavy religion bashing. Original poetry is welcome, likewise the perfect recipe for lasagna. Send by e-mail to:

[Phactpublicity@aol.com](mailto:Phactpublicity@aol.com)

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## Errattium

**Gadzooks!** Tom Napier has discovered a factual error in Phactum! How is that possible? In the interests of skeptical rigor, the Phactum ad for Tony Rothman's talk in the October issue was incorrect. It says, "Tony is a professor of physics -- where Einstein used to teach at Princeton University." Einstein didn't teach and never worked for Princeton University. He was a member of the Institute for Advanced Study, a privately funded theoretical research organization that does no teaching and has no connection with the University.

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## Letters

Editor: This spring I was put to considerable trouble and expense by the ethanol-contaminated gas powering my sail-boat's outboard motor so I am not entirely unbiased. However, I can see how both Bob Park and Ed Rendell are right about ethanol. Bob Park is right because, from the energetic point of view, growing corn to make mash which is heated by oil to ferment and distill it into alcohol is a very dubious process. Ed Rendell's concern is that most of our oil is imported from an avaricious and unstable area of the world. A home-grown fuel is preferable whatever the cost.

Britain went to extreme lengths to extract oil

from under the North Sea rather than rely on Middle Eastern sources. (In the U. K. about two-thirds of the pump price of gas is tax. Imposing a similar tax here would go a long way to curing our "dependency on foreign oil" and would pay for an awful lot of bridge repairs.)

There are two solutions, neither of which I've seen previously mentioned. As any Eastern European will tell you, if you want really cheap vodka you use potatoes rather than grain as your raw material. Potato plants have a far larger proportion of useful content than corn plants and getting our fuel from Idaho rather than the Persian Gulf would be a great step in the right direction.

The other solution, although geographically awkward, is cogeneration. The waste heat from conventional power stations comes at the perfect temperature for fermenting mash and distilling alcohol. This not only would make use of a wasted resource, it would eliminate the fuel used and the carbon dioxide emitted by the present process.

Tom Napier  
North Wales, PA

Editor: Does the following qualify as a clerihew?

Ray  
Asks for money  
From us poor members  
Whose dues were due in September.

Sidney Gitlin, Ph.D.  
Philadelphia

**Editors note: It qualifies as a supercharged clerihew with Pyramid Power. Dues and donations should start rolling in!**

Editor: Were the clerihews mentioned in a good way or a bad way? If the latter, don't tell me. Your friend's poem would qualify as a clerihew, almost, if he changed "money" to "mon-AY."

Send more clerihews? What do you think I am, a



The Real McCoy:  
From the Jar to Your Car!®

clerihew machine? However, the carp did jump into the boat one more time: (pay attention, this is good)

Ray Haupt  
Without a doubt  
Is a better editor  
Than he's given credit for.

Okay, so I stretched the rhyme a little. You may need to change your name to Haupt, or Haut, but it would be totally worth it.

Elaine  
Is a pain  
She writes poems  
That don't really rhyme and where the last line is much  
too long.

Elaine Brody  
Paoli, PA

**Editors devilishly clever response:**

Elaine,  
Your refrain  
Is cute and well writ,  
**Perfect for Phactum or the front page of GRIT.**

Editor: An answer to: "But Anything's Possible", by Madeline van Hecke, Ph.D., Phactum, September 2007.

It seems to me that a good response simplifies your own earlier analogies. Rather than comparing the tastes of water with different additives, which a student may never have done, perhaps you can be more general:

*"We only know what we think the evidence we just obtained means. We interpret that to the best of our ability. Later, OTHERS repeat the experiment (often with minor variations,) and interpret the evidence THEY obtain. Finally, after SO MANY experiments have been done that all the different variables can be accounted for, the evidence and its various interpretations are analyzed, summarized, and reported as a standing conclusion. After that, others may challenge the conclusion, but it then falls on them to demonstrate that evidence indicates the conclusion needs alteration. In short, we "know" because we use the scientific process to obtain our information."*

As an excellent case in point. Dr. van Hecke, a serious psychiatry curriculum should include a study of the "recovered memory" controversy several years back. A large portion of the professional psychiatric/psychological care community adopted "recovered memory therapies" as techniques and treatments, BEFORE exhausting the scientific process which eventually revealed that recovered memories were

unreliable as evidence of earlier events and traumas.

Some practitioners dogmatically clung to the procedure, even after it had been shown invalid, but eventually, the community accepted that the BEST of the combined evidence showed that recovered memories were too subject to extraneous influences to be considered reliable. If students are taught THAT particular story early in the curriculum, teachers can later refer back to it as an example of how we COME to know just about anything, scientifically.

ANY field of science can relate a similar embarrassing rush to conclusion, revealed only later by further study. It is by admitting to our mistakes of the past that we demonstrate to students the aspect of science which forever separates it from blind faith, as a methodology.

Paul Schlueter III,  
Dallas, PA

Editor: A couple points in the report on the September meeting were misleading.

First, it's mentioned that no one was burned as a witch in Salem. This is true, but it doesn't mean that no one was executed. I believe hanging was the usual procedure.

Second, it's stated that "one Q&A question related to another historical event thought to be analogous to the Salem witch trials, the McCarthy anti-communist inquisitions." Actually, the point I raised was about the "anti-DP" (deep penetration agent) campaign among the Phillipine New People's Army guerrillas a few years ago. The question of McCarthyism came up in the ensuing exchange between myself and the speaker. While it's true there really were Soviet spies in the US (just as there were American spies in the USSR) my point was that the paranoid atmosphere of McCarthyism led to equating political dissent with disloyalty, even where there was no evidence of espionage -- leading to the blacklisting of thousands of people based simply on their beliefs. It may likewise be observed, hypothetically, that even had there really been witches consorting with Satan in the woods near Salem Village, the flawed process of the trials guaranteed that some innocents would still have been convicted and hanged.

Eric Hamell  
Philadelphia

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## Various Ruminations

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

### Will WD-40 be the new aphrodisiac?

I read the following news item with some despair. Is it really possible that a graduate degree in science from a first class university was awarded for what is no more than fantasy speculation and not a very original one at that?

#### *Researcher: Humans will wed robots*

*MAASTRICHT, Netherlands, Oct. 11 (UPI) -- The University of Maastricht in the Netherlands is awarding a doctorate to a researcher who wrote a paper on marriages between humans and robots.*

*David Levy, a British artificial intelligence researcher at the college, wrote in his thesis, "Intimate Relationships with Artificial Partners," that trends in*



*robotics and shifting attitudes on marriage are likely to result in sophisticated robots that will eventually be seen as suitable marriage partners.*

*Levy's conclusion was based on about 450 publications in the fields of psychology, sexology, sociology, robotics, materials science, artificial intelligence, gender studies and computer-human interaction.*

*The thesis examines human attitudes toward affection, love and sexuality and concluded that the findings are just as applicable to human interaction with robots of the future as they are to the relationships between humans of today.*

I wonder if Dr. Levy worked out problems such

as divorce and marriage between same sex robots? Levy predicts that Massachusetts will be the first legal jurisdiction to allow robot-human marriage. The clergy will have to get into this discussion at some point and it will be fascinating to see which religious sect will extend the sacrament of marriage to such couples. I am betting on the Unitarians.

### Global Warming - Ethanol

The October edition of the National Geographic has an excellent article about ethanol and how it came to be that Brazil has weaned of imported petroleum to operate its motor fleet. Today, Brazilian vehicles run exclusively on ethanol. This is certainly a considerable achievement which began in the 1970's when Brazil was ruled by a military dictator.

It is unlikely that the United States can ever achieve a similar feat, certainly not by converting food crops to ethanol. Brazil is brewing its ethanol from sugar cane, the US from corn. Sugar cane stalks are

about 20 percent sugar, far more than is found in corn. The ethanol yield of an acre of sugar cane is about 600-800 gallons whereas the yield per acre of corn is about half that. Furthermore, Brazil is a wholly tropical land ranging from about 5 degrees north latitude to about 30 degrees

south. The US, on the other hand lies almost wholly north of 30 degrees north latitude. Thus, Brazil has a more favorable tropical climate for plant growth.

Interestingly, Brazil in 2005 produced about 3.96 billion gallons of ethanol and is able to supply its entire motor fleet. The US, in contrast, produced even more in 2006, about 4.86 billion gallons which is sufficient to power just a few percent of its motor fleet, mainly in the form of E10 which is a blend of gasoline and up to 10 percent alcohol. One wonders what percent of alcohol is really being dispensed. Some senators are eager to increase US ethanol output to



some 60 billion gallons. The needs and capacities of the two countries are obviously very different.

Environmentalists worry that millions of additional acres of land will be deforested in both countries to produce more ethanol. They are right to worry. Ethanol at its best is unlikely to become a greenhouse remedy, and might even exacerbate planetary environmental problems by deforestation if not extra contribution to greenhouse gas emissions. Is it not ironic that a major power source for ethanol production is coal?

### NHS homeopathic coverage shrinking.

Dr. Stephen Barrett's Consumer Health Digest October 9, 2007 reports:

*Spurred in part by letters from prominent scientists, the United Kingdom's National Health Service is reducing coverage of homeopathic treatment. During the past two years, more than half of the NHS regional administrative agencies have eliminated or sharply reduced coverage. Loss of government funding is a serious blow to the UK's four homeopathic hospitals, at least one of which appears likely to close next year. [Barrett S. Another UK health service agency ends homeopathy funding. Homeowatch, Oct 12, 2007] <http://www.homeowatch.org/policy/wkpct.html> See the article on Malaria and Homeopathy on page 9.*

### Forevermore to be known as a "Crumb"?

On October 17, 2007 The Independent, a UK newspaper, reported that Nobel prize winning geneticist James Watson made some remarks about race and intelligence suggesting that Africans are less intelligent than Westerners. These statements were dubbed "racist" and caused a furor among members of the general public, many scientists, and various civil rights groups. Watson apologized for his remarks the next day, but to no avail. Speaking engagements at major museums and universities were canceled, and Watson returned home to the United States only to be suspended from his position as Chancellor of the Cold Spring Harbor Laboratories.

Were Watson's remarks designed to create a fuss to help promote his new book entitled "Avoid Boring People", or were his remarks just off the cuff and unplanned with no ulterior motives? Perhaps we will never know truly but we do know for sure that Watson violated the powerfully enforced Taboo of questioning intelligence of groups of people by race or ethnicity, and for that he has paid dearly and shall

continue to pay well beyond his eventual death.

I wonder though, whose rhetoric has been the most severe and thoughtless, Watson's or his critics? One as bright as Watson surely would know that this topic can only start a fire-storm of protest just as it did in the 1960's when Nobel Laureate William Shockley, one of the major figures in development of the transistor, branched out into the field of Eugenics which has been condemned by most scientists, civil rights activists, and any politician who hopes to get elected. In my opinion Watson was foolish to embroil himself in this argument.

Both Watson and Shockley were belittled because they made pronouncements outside their fields of specialization. There might be some merit at times to such an argument but does it really hold in this case? One of those critics, several years ago, was Stephen J. Gould, a paleontologist almost universally acknowledged to be brilliant advocate for his causes. Are his credentials superior on the matter of intelligence than Watson's or Shockley's? Another critic, London mayor Ken Livingstone, a Marxist politician, fulminated: 'Such ignorant comments...are utterly offensive and give succour to the most backward in our society.' What are Livingstone's credentials?

But how about Watson's other critics? One need not browse Google long before encountering ranting rhetoric accusing Watson of being "racist", of being partial to Hitler, of being a lunatic, of being unscientific, of pontificating on matters removed from his field of expertise, and so on and so forth. Even worse, at least in the UK, anti-racism campaigners called for Dr Watson's remarks to be looked at in the context of racial hatred laws. A spokesman for the 1990 Trust, a black human rights group, said: "It is astonishing that a man of such distinction should make comments that seem to perpetuate racism in this way. It amounts to fuelling bigotry and we would like it to be looked at for grounds of legal complaint."

This topic is likely to remain controversial for

many years, but do not expect to hear much rational scientific debate on the matter. It is socially easy and safe to contradict Watson on this issue but is little more than career suicide to affirm him.

Unfortunately Dr. Watson does not seem to have read "Blind Spots" by Dr. Madeline van Hecke. See page 10 for more about this book.

### **Global Warming - Atlantic City, New Jersey**

When I was a kid we used to go to Atlantic City from Philadelphia on a train, the Reading Seashore Line. I loved it, of course. The beach and the carnival atmosphere of the Boardwalk. Even then however, although I was too young to know the difference, Atlantic City was a fading rose, perhaps largely due to the proliferation of automobiles after the end of World War 2.

Things rapidly deteriorated in Atlantic City after the war, the old grand hotels were getting shabby, and one by one were demolished to eventually make room for the casino boom that occurred beginning in the 1970's. The casinos were supposed to cause an urban renaissance but that has been slow in coming. Too be sure there is some new housing and new construction, most of which is in the form of casinos. The old Atlantic City is gone and that anticipated gusher of tax money to the state of New Jersey does not seem to have given any relief to ordinary citizens. NJ is a high tax state and Atlantic City is a dump. In the last two or three decades an absurdly high percentage of city council representatives have been indicted and sent to jail for various financial crimes. Likewise the mayors. Four of the last eight mayors have been sent to jail.

But all is not dreary. The Jersey-Atlantic Wind Farm has been built on the site of Atlantic County Utility Authority's water treatment plant. This wind





farm, consisting of five turbines, is rated to produce a maximum of 7.5 megawatts of electrical power and is physically situated just a short distance from Atlantic City's largest casino, The Borgata.

The wind farm has itself become a tourist attraction and is a very impressive when viewed from across the bay at Brigantine Wildfowl Refuge. From that viewpoint the wind farm appears to be nestled in a cluster of casinos, but actually is not. Apparently there were no great fears that migrating geese and other birds will be sliced and diced by these mechanisms despite being in the waterfowl migration flyway.

New Jersey's real potential for creating useful industrial quantities of wind energy lies offshore and at this point in time there are no offshore wind turbines in operation. This is not an untested technology but is being heavily resisted by bureaucrats and NIMBY curmudgeons. Offshore wind energy is heavily exploited in Europe and the technology is improving. If according to environmentalist zeitgeist carbon dioxide emission is a bad thing and nuclear power is feared, than I am hard pressed to understand the objections to development of clean and sustainable power. Perhaps there are good objections as a matter of physics but surely not as a matter of parochial interests such as obstructed sea views or danger to sea turtles..

Congratulations to Atlantic City and the Atlantic County Utility Authority. You got this one right.

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"Don't laugh, you're next. St Peter says these new units are more energy-efficient."

## Mensa General Membership Meeting

Friday, November 9th, 8pm

### Wind, Water, Sail and Solitude: Sailing the World Solo

Who has not thought about leaving it all behind and disappearing into the unknown? There are many ways to accomplish this; running away and joining the circus is only one. Another is to set sail and see what lies beyond the horizon.

There are twenty three thousand miles of adventure over that horizon and our speaker for the night saw each and every one of them. Dan Meggit will tell us about how he planned and then executed his plan; to see the world from the deck of his boat and do it alone.



The General Membership Meeting will be held at the Police Administration Building, 750 Race Street, Philadelphia, PA. This meeting is Delaware Valley Mensa's only activity specifically open to the public, so feel free to invite your friends and relatives. The meeting will begin promptly at 8:00.p.m. P.S: Don't let traffic on the Schuylkill Expressway interfere with your attending. Consider taking SEPTA and exiting at Market Street East / Gallery. It is only a two block walk north to the Police Administration Building.

### A Mathematically Correct Limerick By John Saxon

A dozen, a gross, and a score,  
Plus three times the square root of four,  
Divided by seven,  
Plus five times eleven,  
Equals nine squared plus zero, no more.

## October Meeting Report

### Faye Flam is back - talking about journalism, science and sexuality

By Eric Krieg

On October 20th we had Faye Flam talk about many of her experiences writing a science oriented column on sexuality. Faye has been a science writer for the Philadelphia Inquirer for years and is a recipient of PhACT's award for Journalistic Integrity. She was introduced by our own David Cragin.



Among what Faye explained is that many of the stories even off the front page come "off the wire" or from a news service. For that matter, many of her stories run on the wire and are picked up on papers all over the country. She also explained that the stories that unfortunately make it big are ones that tend to push fear. Apparently there is no correlation between how hard she works on a story and how prominent it appears. She implied that some of the Inquirer's recent stories to run hadn't been properly vetted. She also explained that things at the Inquirer are tight and many "copy editors" have been let go - that was a good explanation for a few audience members that complained of declining quality. She explained that these copy editors pick title names for other people's stories.

We caught a lot of new anecdotes, many about stories we in the audience had read - for example a credulous wire story about a scientology treatment for anyone with a long list of vague symptoms. She also talked about interviewing inspectors for weapons of mass destruction. She explained how "scares sell" and went on to say, "journalists don't need to be experts, only to know how to find them" - in her case, that often means travelling to remote locations overseas. Among some things she said that stuck in my mind: "People asked me how I could go from writing for a leading science magazine into newspaper journalism - it is easy, I now have millions of readers".

The funny part of Faye's talk was about uptight readers freaking out over her mentioning sexual topics in her column. For example, a number of people fell apart when she wrote something to the effect of "the most hazardous thing about vibrators is disposing of the

batteries. I found some of the hot headed poorly written complaint emails to be downright funny when not creepy.

Faye's big announcement was that she has a book coming out with a title something along the lines of "the evolution of sex" - though the publisher will likely pick the title and byline. She wasn't allowed to just include her Carnal Knowledge column in the book; so she is rewriting material. It will be published by Penguin books in June of 2008. Among the topics will be a discussion of pick up artists and their book "the game". In the mean time, her column still runs in the Monday Science edition.

Stay tuned to future issues of Phactum which will surely help promote her book. Also, tune into Faye's web blog, **Sex, Science and Voice Mail**, where she explores the public reaction to her column, "Carnal Knowledge". <http://blogs.phillynews.com/inquirer/sexscience/>

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## Soundbites

Compiled by Becky Strickland

♣ "IQ gains have not inoculated people against credulity. Abstract categories and analysis can be used to defend nonsense rather than sense. Look at the number of people who believe in creationism, flying saucers and astrology." James R. Flynn, in an article discussing the mean increase in IQ scores over the past 4 generations, explains that the increase doesn't necessarily translate to better reasoning. *Scientific American Mind*, October/November, 2007.

♣ "This is our way of seeing how God created the universe and [ the Vatican] wants to make a strong statement that truth doesn't contradict truth; that if you have faith, you're never going to be afraid of what science comes up with. Because it's true." Guy Consolmagno, curator of the Vatican meteorite collection describes how Catholicism has nothing to fear from the discoveries of science. BBC online, September 27, 2007. The Vatican hosted an astronomy conference in early October.

♣ "We need climate change skeptics. Not because they are right - at least not on the big issue of human

culpability in recent warming - but because they ask hard questions that lead to deeper knowledge. What we do not need from them is misrepresentation and cynical trashing of scientists' work ." Editorial, *New Scientist*, October 6, 2007.

♣ Bigfoot hunters weep. "There is no question it is a bear with a severe case of mange." Jerry Feaser of the PA Game Commission on a photograph taken on September 16, in the Allegheny National Forest north-



east of Pittsburgh. (Associated Press, October 28, 2007.)

♣ "When I am president, I will end this assault on science. America will once again be the innovation nation" Senator Hillary Clinton, speaking at the Carnegie Institution for Science in Washington DC on George W. Bush's record on science (*Reuters*, October 4, 2007.)

♣ The British charitable trust, *Sense About Science*, recently worked with a group of young researchers who contacted manufacturers of unorthodox medical & health products to ask about evidence for their claims. The products ranged from a skin patch to draw out toxins to a CD that channels homeopathic waves from your computer to your body. The group published a pamphlet "There Goes the Science Bit...." that details some of the answers. The pamphlet co-editor, Frank Swain, reported the manufacturers seemed completely unprepared for the questions and not one could produce solid evidence. Earlier this year, the group publicly called for celebrities to be sure of the evidence before speaking on topics related to science and medicine. For more on this group, see their web site <http://www.senseaboutscience.org.uk/>

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## Strange Places: Exploring a Haunted Hay Ride

by Eric Krieg

In the course of early morning runs exploring with friends, I often consider myself a suburban anthropologist - with a special interest in the strange behavior of my fellow man.

A week ago, 3 of us decided to go running in an area including 2 farms that host a haunted hayride. Haunted hayrides didn't seem to be around when I was a kid, but they have a number of scary stations often manned by live ghoul actors.

Our off hour tour was not quite the same experience, but being into it, I brought along a few scary pictures of a certain presidential candidate who scares the hell out of me to put up and a make shift tomb stone (cut from extra dry wall) with all our names on them - I added an appropriate epitaph of "hung for trespassing".

The latter contribution was a first hand study in urban legends. I ran again since dropping it off and noticed it is still where I left it - next year I will see if it ends up having been packed up with the other stuff and put out again. The stations along the part of the course we explored had some creative points, a UFO an in-breed looking red neck spot, a motorcycle accident, a mad scientist station and the devil himself. As a skeptic, I see it is as good fun to tease good-humoredly the superstitions that others have fallen prey to.

*Eric Krieg is president of PhACT and an ardent de-bunker of the paranormal and other nonsense.*



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**Idealist: One who, on noticing that a rose smells better than a cabbage, concludes that it will also make better soup.**

**H.L. Mencken**

## Sense About Science: Malaria & Homeopathy

In July 2006, **Sense About Science** brought together leading experts in malaria and tropical diseases to respond to public misinformation about alternative ways to prevent malaria. They have warned that homeopathic medicines offer no protection against malaria or other serious tropical diseases.

This followed an investigation by science writer and broadcaster Simon Singh, in collaboration with Sense About Science, which showed that the first ten homeopathic

clinics and pharmacies selected from an internet search and consulted were willing to break public health protocols by providing unproven homeopathic pills to protect against malaria and other tropical diseases such as typhoid, dengue fever and yellow fever.

In all ten consultations, Sense About Science intern Alice Tuff was advised to use homeopathic products instead of being referred to a GP or conventional travel clinics where effective medicines are available. Alice, who recorded the discussions, said she would be traveling through several African countries, which included places where the World Health Organisation has reported an increase in *P. falciparum*, the most dangerous species of malaria.

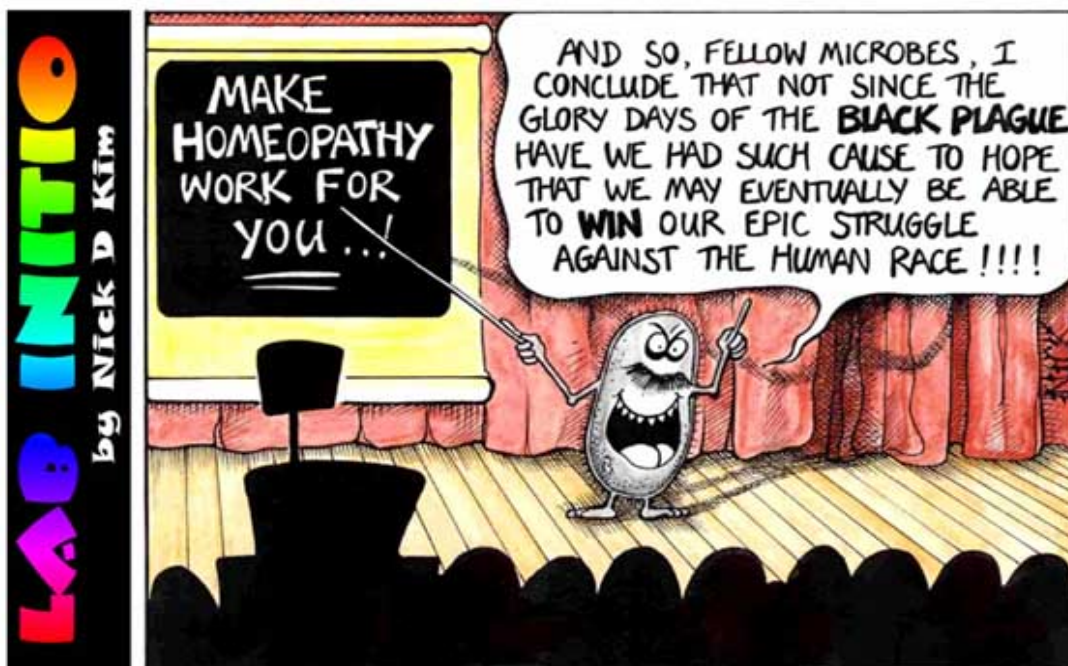
Malaria and tropical disease specialists have is-

sued a warning to people who travel in disease-affected areas:

- Homeopathy will not protect you from malaria or other tropical diseases.
- Get reliable advice before traveling: speak to your GP or local travel clinic.
- Do not buy antimalarials - or other medicines claiming to prevent or cure serious tropical diseases - from the internet.

In a press release they also urged the government to ensure that the safety of the traveling public is

not compromised by the promotion of unproven remedies for such serious diseases.



*Editors note: This article was found at the rather spiffy internet website of Sense About Science, a London based organization dedicated to giving young*

*scientists a voice in explaining science and more importantly to explain the fallacies of pseudo-science and purposeful dissemination of misinformation put forth by hucksters of dubious products and services. I wish to thank Dr. Aarathi Prasad, a biologist and administrator of Sense About Science, for giving permission to use their materials. Check out their website at: <http://www.senseaboutscience.org.uk>. I am sure you will be favorably impressed and do not be shy about sending donations.*

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***Fallacies do not cease to be fallacies because they become fashions.  
- G. K. Chesterton***



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## Einstein at Princeton

Albert Einstein began his relationship with the University in 1921, when he visited Princeton to receive an honorary degree and to lecture about his theory of relativity. At that time, the



Albert Einstein (third from right) with Princeton physics department members c.1935

University was a major center for the study of theoretical physics. Einstein moved to Princeton Township in 1933, where he lived until his death in 1955. While living in Princeton, Einstein worked at the newly founded Institute for Advanced Study.

Though the Institute is independent of the University, its original offices were located on Princeton's campus. As such, from 1933 to 1939, Einstein's office was 109 Fine Hall (now Jones Hall) and he also conducted work in the Palmer Physics Laboratory (now the Frist Campus Center). Though he was never a member of Princeton's faculty, Einstein led a University seminar on the mathematics of relativity and often helped students with math problems.