

National Capital Area

SKEPTICAL EYE

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October 16 Annual Meeting to Focus on Quackery

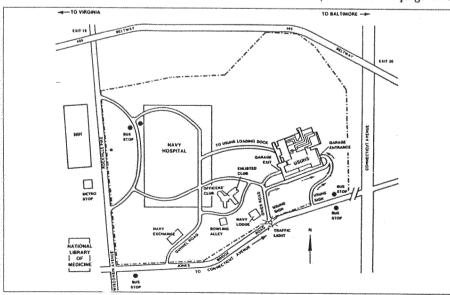
- Is immunoaugmentive therapy a miraculous cancer cure or a dangerous fraud?
- Can homeopathy cure disease and help you lose weight?
- Can you really dream away your unwanted fat?
- Can the mercury in silver fillings cause infertility and multiple sclerosis?
- Does adjustment of the jaw cure gynecological problems?
- Do megadoses of vitamins and special diets cure chronic diseases?
- Do "sports drinks" improve athletic performance?
- Can you sort nutrition fact from fads?
- Did you know there are hundreds of questionable AIDS therapies available, from acupuncture to ZPG-1, the "anti-AIDS pill"?

Questionable therapies run the gamut from life-threatening hoaxes to ripoffs. According to the House Select Committee on Aging, quack products and treatments lure patients to the tune of \$4 to \$5 billion each year.

Some of the nation's leading experts on quackery will examine a wide range of questionable therapies at NCAS's Annual Meeting on Sunday, October 16, from 1 to 5 p.m. at the Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD (the site of NCAS's "UFO Abductions" meeting last June). The cost of admission will be \$2 for NCAS members, \$5 for nonmembers.

When you arrive, you'll have a chance to examine up-close the Food and Drug Administration's display of seized quack devices—bust developers, fat reducers, electronic AIDS cures, and more.

Keynote speaker Stephen Barrett, M.D., will provide an overview of quackery, including schemes to heal chronic diseases and nutrition cultism. Barrett, a practicing psychiatrist in Allentown, PA, founded the nation's first antiquackery group, the Lehigh Valley Council Against Health Fraud. He is editor of the *Nutrition Forum* newsletter and author of *The Health Robbers* and numerous articles debunking fraudulent health schemes. (Continued on page 12.)



Randi on the Offensive at the Humanist Congress

By Neil L. Inglis

Every special-interest organization needs its own "pit bull"—someone who knows how to launch an attack, kick the opposition's teeth out, and dream up colorfully offensive quotes to delight the press. In almost every respect, James Randi fits this bill. He has, as he himself admits, a talent for offending people. But there are times when neither friend nor foe is safe from his barbs.

Picture the scene on the first of August at the Sheraton-Brock Hotel overlooking Niagara Falls, where some 800 people were attending a special banquet as participants in the Tenth Humanist World Congress, sponsored by the International Humanist and Ethical Union (IHEU). It was here that Randi presented the first of two scheduled talks,

"In the 1970s, Uri Geller dazzled the world with his incredible psychic powers. And now...he's selling aluminum siding!" Round one to Randi, and the punches kept coming. If the forkbender extraordinaire is as wealthy as he says he is, then why, inquired Randi, is he reduced to working as a pitchman for Edy's ice cream? This is the mark of a (Continued on page 5.)

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National Capital Area Skeptics

Statement of Purpose

NCAS attempts to encourage the critical investigation of paranormal and fringe-science claims from a responsible, scientific point of view, and to disseminate factual information about the results of such inquiries to the scientific community and the public.

NCAS does not reject claims on a priori grounds, antecedent to inquiry, but rather examines them objectively and carefully.

Signed articles represent the opinions of their authors and do not necessarily reflect the views of NCAS. Unsigned articles are the responsibility of the NCAS Newsletter Committee. Only articles clearly marked as such represent positions of the NCAS Board of Directors.

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"In Response to Today's Story..."

By Julie D. Stern and Randy Lockwood

Many skeptics—ourselves included—frequently complain about how gullible the media can be in parroting the claims of psychics, UFO alien abductees, faith healers, and others without presenting a skeptical counterpoint to these claims. We skeptics often wonder, "What can I do?" in response to a particularly credulous newspaper column, magazine article, or television show.

The answer to this question is "Speak out!" By writing letters to newspaper and magazine editors and radio and television producers and reporters, we can make our skeptical views known and influence the ways other groups and individuals view paranormal claims. While NCAS as a group will continue to respond officially to such claims, individuals should not hesitate to respond on their own. (However, your letter should not imply that you are speaking in an official capacity for NCAS.) Your thoughts and opinions on a particular matter may even be more important to a local newspaper editor than an official "group" response. And the more people who criticize a credulous story—or, for that matter, compliment a skeptical one—the more likely it is that we will have some impact on the way the press handles these issues.

We hope you will feel moved to write a letter to the editor or comment on a television or radio show. If you're uncertain how to proceed, here are some guidelines for getting your views across:

Letters to the Editor

	Be brief and to the point. Newspapers and magazines have limited space for the	Ù
lette	s columns. Your letter has a better chance of being printed if it's succinct and i	- Section
the n	nain point is in the first paragraph.	

☐ Don't waste space by restating the comments that prompted your letter. A brief line referring to the original story is enough. Save space for your own point of view!

☐ Respond promptly. Commenting on a month-old newspaper article will probably ensure that your letter will wind up in the wastebasket instead of on the editorial page. Write while your thoughts are still fresh and before readers have forgotten the original story.

☐ Choose your words with care. A letter that is strident or rude can overshadow your message. Be firm in what you have to say, but keep in mind that a calm, moderate, and rational tone is often the most persuasive.

☐ Sign your letters. Anonymous letters don't make their way into print.

TV and Radio

☐ When responding to a locally produced program, write to the station's public affairs director. You may also want to send copies of your letter to the program's producer, writer, and/or reporter. Call the station to find out the names of these people. (Some addresses and phone numbers are listed below.)

☐ Comment on a network program by writing to the network's audience services department. Again, you may also want to send copies to producers, writers, and/or reporters involved in the show.

☐ Always indicate which television or radio program you are commenting on, and include the date and time the program aired in your letter.

☐ Sponsors can be quite responsive to viewer comments. Note which products are advertised on a show that you want to criticize—or praise—and write to the sponsor. You can find the sponsor's address on the product itself or at the reference section of your library.

cc: NCAS

Finally, send a copy of your letter to NCAS, in care of this newsletter. By publishing your letter, we may be able to motivate others to write!

Where to Write

See the list of local newspapers and television stations and national TV networks on page 3.

From The Stars To Star Wars

By Stephen R. Dujack

It was certainly shocking to learn last spring that President Reagan and his wife use astrological predictions to guide them in their decision-making—and not just for personal stuff, but also for some matters of national importance. The news that the First Family regularly consults a San Francisco astrologer disturbed many Americans, and properly so.

At about the same time those revelations came out in former White House Chief of Staff Donald Regan's book, however, it went relatively unnoticed that Senate Foreign Relations Committee Chairman Claiborne Pell (D.-Rhode Island) was telling his colleagues that Uri Geller might be of use in determining whether the Soviets cheat on the new missile treaty signed by the superpowers the previous fall.

In fact, for years the military and intelligence communities pursued research into the possible applications of parapsychological phenomena, at a cost of millions of tax dollars. Pell has been one of their strongest supporters in these endeavors. Then last December the National Academy of Sciences issued a report by a special committee appointed to look into the matter. There is "no scientific justification from research conducted over a period of 130 years for the existence" of psychic phenomena and, therefore, parapsychology is not a useful pursuit for those concerned with our national security, the panel concluded. "It's pretty much baloney," said the study's director, Daniel Druckman.

Pell and Geller Undeterred

In a conversation last spring, one of Pell's aides told me that the senator is nonetheless undeterred in his belief in Geller and the validity of parapsychology. That's too bad, for the history of research into military applications of psi has paralleled the career of the Israeli psychic, and no amount of debunking appears to be able to stop either one.

Geller acquired international fame a decade and a half ago by using his abilities as a stage magician to supposedly bend metal by psychic means. More recently, if we are to believe what he says in his 1987 autobiography, *The Geller Effect*, the Israeli has spied on the Soviet embassy in Mexico City and its consulate in New York at the behest of the CIA; impressed Henry Kissinger and Jimmy Carter with his mind-reading stunts; and even telepathically convinced former Soviet diplomat Arkady Shevchenko to defect. He also claims to have broken the famous "Son of Sam" murder case and located the kidnaped son of Seagram's millionaire Edgar Bronfman. (He insists,

(Continued on page 6.)

Where to Write "In Response..."

Local Newspapers and Television

Washington Post 1150 15th Street NW Washington DC 20071 Phone: 334-6000

Washington Times

3600 New York Ave., NE Washington DC 20002

Phone: 636-3000

WJLA-TV (ABC) 4461 Connecticut Ave. NW Washington DC 20008 Phone 364-7777 WRC-TV (NBC) 4001 Nebraska Ave. NW Washington DC 20016 Phone: 885-4000

WUSA-TV (CBS) 4001 Brandywine St., NW Washington DC 20016

Phone: 364-3900

WTTG-TV (FOX) 5151 Wisconsin Ave., NW Washington DC 20016 Phone: 244-5151

WETA-TV (PBS) 3620 27th Street South Arlington VA 22206 Phone: 998-2600

Networks

CBS Audience Services 51 West 52nd Street New York, NY 10019

ABC Audience Services 1330 Ave. Americas New York, NY 10019

NBC Audience Services 30 Rockefeller Plaza New York, NY 10020

President's Message

By D.W. "Chip" Denman

Last month several fellow skeptics and I attended a faith healing rally at the D.C. Convention Center, Newspaper advertisements had run all week, promising four nights of healing and miracles. This was the final night, the special anointing service, which promised the most: "Bring the blind, the lame, the deaf, all who are sick." A quick check with James Randi beforehand suggested that this particular faith healer, Morris Cerullo, would not put on a high-tech show. I went curious about both the performance I was about to see and about the audience that was coming to see it. Although Randi's The Faith Healers did not mention this particular man, much of what I saw was "by the book."

The neatly dressed crowd of about 1,500 appeared to be a demographically representative sample of the Washington community, and included men and women of all races and all ages. Even before the doors opened I saw people with crutches and in wheelchairs waiting to be let in. Gospel music with an electric beat set the mood.

Every chair in the hall had waiting on it a pledge envelope suggesting donations of \$10, \$100, \$1000, and quoting Acts 20:35, "it is more blessed to give than to receive." Those of us seeking a miracle were enjoined to fill out a "healing card" to describe the particular needs we hoped to have eased. ("Mark one or more: _Physical _Emotional _Spiritual _Financial.") The card also instructed those who wanted to participate in the special anointing service to sign a statement releasing the ministry and its agents from any and all liability.

Before the service began, ushers moved up and down the aisles, selling genuine plastic plaques bearing God's inspirational message to Cerullo-"regularly \$3.95, but tonight just \$3 for two." A respectful audience then listened to Cerullo's 30-minute plea for donations, needed "because advertising and expenses are all so high here in Washington." Think hard about how much we could afford to give, we were told, and then give more. "Give until it

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becomes a sacrifice," directed Cerullo. And dutiful members of the audience obeyed, writing checks and putting folded bills into envelopes. I saw one young man spend 20 difficult minutes writing a check for \$22.50.

All of this I had more or less expected. I did not expect the evangelist's voice to sound so thin. By most standards, his performance skills were unimpressive, but the audience responded nonetheless. As the healing part of the service began, Cerullo used the "shotgun" technique of calling out to the crowd: "Someone out there has back trouble.... NOW it is healed!" He singled out back pain, fused disks, and spinal trouble, declaring them all healed. Cerullo's aides, local ministers, and ushers helped joyous people to the stage to give witness to their healing. A woman who said that she had suffered back pain for years touched her toes in proof of her personal miracle. More ailments were called out to the audience, and often grateful sufferers responded. Impassioned, but not always medically accurate, Cerullo declared that those with "ruptures" were now being healed and held his hand to his abdomen while he spoke of curing a hiatal hernia. When no one responded to several suggested ailments, he quickly moved on to others. Rapturous participants with tears streaming down their faces testified to the banishment of their arthritis, "growths," and alcoholism, and fell backwards to the floor at Cerullo's touch.

I found myself thinking of the evangelist as a performer who was giving his audience exactly the kind of theatrical experience it had come for, made all the more powerful by offering each individual a chance to participate. A Kennedy Center crowd paying \$50 a seat to see *Les Miserables* could not have been more excited. I was not pleased by the show, but for much of the evening neither was I outraged.

Significantly, Cerullo made no mention of heart disease, cancer, or diabetes. No one in a wheelchair or on crutches was ever brought to the stage. Despite sections set aside for the deaf and the blind, these afflictions were never mentioned by the alleged healer.

This cautious approach to faith healing may be due in part to Randi's and other skeptics' aggressive campaigns against fraudulent hucksters. By avoiding specific mention of lifethreatening illness and easily verified conditions, a supposed healer runs much less chance of being publicly exposed. Witness also the signed release forms, which may not stop a lawsuit, but which certainly could act as a strong psychological deterrent to members of the easily impressed crowd.

But one woman on the stage gave a testimony that I could not listen to impassively. Cerullo had declared that persons with "growths" of all kinds were being cured. This woman, ecstatic as if a burden had been lifted from her, told Cerullo and the audience that two weeks before her doctor had found a lump in her breast and wanted her to come in for surgery. She had not. And now, this night, she knew that she had been cured; she would not need to see her doctor. Cerullo beamed.

The toe-touchers with bad backs, the arthritics, those with hernias would all wake up the next day. They would know that their aches had returned, perhaps worse than ever. Perhaps they would doubt their faith, perhaps they would doubt Cerullo's



claims, or perhaps they would see themselves as unworthy in God's eyes. These people may not rush to join NCAS, but at least they have the opportunity to personally test these extraordinary claims. But a woman who may have breast cancer was encouraged to avoid the skeptical evidence until it may be too late to save her life.

For a closer look at some of faith healing's other stars, I suggest Randi's book, as well as articles by Joe Barnhart and David Alexander in the current (September/October) issue of *The Humanist*.

Fairy Ring Mushrooms

By Alexander White

Fairy ring mushrooms have been said to account for bare spots claimed to be UFO landing sites. This is apparently because of a belief that the fungi poison plants.

Many mushrooms form rings. These include Scotch bonnet (Marasmius oreades), meadow mushroom (Agaricus campestris), St. George's mushroom (Tricholoma gambosum), and puffballs (Calvantia cyathiformis). Ring mushrooms are usually found on lawns and in meadows and meadowlands.

The fungi start with the germination of spores. The underground part (mycelium) expands outward, seeking nutrients. When similar mycelia meet, they join together to form a single network of threads. The inner part of the mycelium gradually dies from lack of food and becomes good fertilizer. This produces a ring of tall green grass. Each year, the ring of mycelium grows larger and mushrooms—spore-emitting fruitbodies—emerge from its outer edge. The mycelia of some species can interfere with plant growth by removing water, which may create a ring of sparse brown grass.

With suitable temperatures and sufficient food and water, a mycelium ring may expand for centuries. Fairy rings of meadow mushrooms and puffballs more than 600 feet in diameter can be found in the grasslands of Kansas. These are estimated to be around 500 years old.

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Randi on the Offensive, from p. 1

cheap hustler, not of the dedicated visionary that Geller has always pretended to be, but what can we expect from someone who tries to pass off as miracles simple tricks that Randi says he himself used to find on the backs of cereal boxes. Finally, Randi replicated the "melting spoon" trick (anyone remember Uri's immortal words, "It's like plastic"?)—just the latest in a trail of snapped and twisted cutlery left in hotel restaurants and TV studios around the world.

Moving onward and upward, the bearded wizard reviewed his recent investigation of the zero-dilution "homeopathic effect" experiments conducted under the supervision of Dr. Jacques Benveniste at the French National Institute of Health and Medical Research. These experiments, as you may recall, were supposed to prove that "water has memory." As Randi joked afterwards, "I'm not going to sing in the shower anymore—who knows where that water might end up?"

French junior researchers, it seems, tend to "cook" their results in order to please their supervisors. Randi lashed out at the French scientific establishment for creating an atmosphere of self delusion antithetical to the practice of true science. He hung Benveniste out to dry, mocking the Frenchman's accent with stereotyped Gallic gestures. Now, this sort of francophobe humor is all very well at times, but is not in the best of taste when French guests are in attendance, and is even less appropriate when special guest Jean-Claude Pecker (professor of astrophysics at the College de France) is sitting beside you at the high table. Randi's second mistake was to assume that all humanists share his views about unorthodox medicine: judging by the gasps of indignation I overheard from other tables for the rest of the evening, many in fact subscribe to homeopathic methods.

Skeptics enjoy too little influence for sour moments like these to hold much significance in the grander scheme of things. The question is: Does Randi's "kick-'em-in-the-ass" approach help us to attract fresh supporters to the rationalist cause, or does it merely alienate the outside world?

An altogether lighter touch was shown by Canadian author and magician Henry Gordon during the "Science, Pseudoscience, and the Paranormal" symposium held the next day at the Amherst campus of the State University of New York at Buffalo. (Randi was also in attendance, but performed no tricks and covered much the same ground as in his earlier speech.) At one point, Gordon held up two playing cards (a four of spades and a nine of hearts) and asked the audience what was wrong with them. We couldn't tell. As it turned out, the spades were red and the hearts were black—and none of us had noticed! This simple stunt, using a magician's "cross-deck," is just one method of illustrating the fallibility of human perception, and can be used as part of a broader educational program for teaching techniques of critical thought as well as a skeptical approach to the paranormal. In their delicacy and abstention from ad hominem argument, Gordon's methods are, I suspect, far more liable to gain converts to our cause.

For now, journalists and newspapers are likely to turn to James Randi when they need an individual skeptic's point of view. And, sure enough, halfway through a special lunch held

CSICOP and SI at the Humanist World Congress

By Neil L. Inglis

One interesting feature of the Tenth Humanist World Congress was a special lunch for *Skeptical Inquirer* subscribers. CSICOP's executive director, Mark Plummer, introduced the CSICOP staff and representatives of skeptical groups from Italy, Mexico, and throughout the United States. He also discussed CSICOP's current research into graphology (several graphologists have been invited to put their work to the test at the upcoming annual conference in Chicago).

Another highlight of the Congress was a special side trip to the *Skeptical Inquirer's* headquarters in Buffalo, which *SI* shares with the officially separate *Free Inquiry*. Our host was Mark Plummer, who ushered us around the offices with managerial pride. *SI* receives a phenomenal number of letters, some of which are delicately referred to as "problem mail" (cranks, complaints, and so forth). An avalanche of mail goes out in turn (subscription renewals, the magazines themselves, the inevitable requests for money, a wide range of correspondence, and so on).

Still more paperwork is generated by SI's mammoth clippings file, to which many of us have contributed at one time or another. Rather less paperwork is generated by the magazines' computerized typesetting machines. (SI is actually printed in Michigan.) SI and FI back issues were everywhere present in neat, orderly stacks. The only disappointment was the library, sorely in need of new titles (that is, money with which to buy them). Poor cash flow is the curse of low-circulation magazines, but on balance, Paul Kurtz and his staff do beautifully well to produce two sophisticated publications with such smooth and well-oiled efficiency. I was most impressed with their operations: beyond any question, they richly deserve our continued support.

for Skeptical Inquirer subscribers attending the Congress, Randi was summoned away by a telephone call from a USA Today reporter, who wanted him to comment on the Oral Roberts fraud trial. You know you've hit the big time when the media are hanging on your every word, and Randi is the center of attention wherever he goes. He may antagonize, he may exasperate, he may enrage, but he is a treasure, and we wouldn't be without him. He may turn off more people than he turns on, but Randi has psychics everywhere quaking in their beds at night, and for that reason, if for no other, he has made the world a better place. \square

"Skeptical scrutiny is the means, in both science and religions, by which deep thoughts can be winnowed from deep nonsense."

—Carl Sagan, as quoted in Time magazine

From the Stars to Star Wars, from p. 3

however, that he declined a CIA request to cause the early death of former Soviet leader Yuri Andropov, who apparently must have died of natural causes.)

Kissinger, Bronfman, and the New York police have denied Geller's claims; Carter refuses to comment on them lest they gain credence; and the others are conveniently uncheckable. This comes as no surprise, as Geller has been thoroughly exposed through numerous books and articles since he first came to prominence. James Randi long ago duplicated all of the Israeli's psychic feats by normal means. Both Hannah Shtrang, a former Geller stage assistant, and Yasha Katz, his former manager, have publicly confessed to helping him fool unwary audiences. He has turned down offers as high as £28,000 to demonstrate the "Geller Effect" under controlled conditions. Just last year the Providence (Rhode Island) Sunday Journal printed photographs that show how he bends spoons with sleight of hand. That anyone could still believe in his abilities is as amazing as spoon bending itself.

But the interesting thing about all this concerns how Geller first won fame in the early 1970s, when supposed proof of his abilities was published in the respected British scientific journal *Nature* by a pair of parapsychologists named Harold Puthoff and Russell Targ of Stanford Research Institute. Although their study has since been found to have had numerous procedural flaws that invalidate their claims—as with many other scientifically trained researchers in the field of parapsychology, they had failed to put in place measures designed to prevent cheating—the two nonetheless gained much fame from the research. As a result, they became leading experimenters in military applications of parapsychology.

A secret CIA report quoted by columnist Jack Anderson in 1984 said that "the Soviet military and KGB have had a covert applied parapsychology program since the mid 1960s" and worried that they may be "ahead of the U.S." in psychic warfare. The Defense Intelligence Agency had been budgeting \$6 million a year—an amount Geller says in his book he psychically projected into President Carter's mind on his inauguration day—to catch up.

Soviet Psi Attacks?

Researchers suspected that the 1963 sinking of the nuclear submarine Thresher was the result of a Soviet psi attack, and that perhaps the infamous microwave bombardment of the U.S. embassy in Moscow was really a parapsychology experiment. They also feared that the Soviets could teleport a nuclear explosion from the wastes of Siberia to the White House lawn. Some of the U.S. research was aimed at forming a time warp over the north pole to divert ballistic missiles into the past. Other studies explored more mundane topics, such as using psychics to break enemy codes.

The sought-after weapons never materialized, but the government decided nonetheless to continue its research by hiring Puthoff and Targ to look into a technique called remote viewing, in which psychics try to describe distant locales. Remote viewing, if successful, could obviously revolutionize espionage, laying bare the Kremlin's deepest secrets.

The two parapsychologists had had a long record of success in this area, but again examinations of their experimental procedures had revealed that the scientists were unconsciously providing hints and other data to aid the subjects. The Pentagon, presumably unaware of these flaws, as well as of their bungled verification of the "Geller Effect," funded project "Grill Flame" with an annual budget of \$1 million.

The principal psychic employed by the two was Ingo Swann. In the early 1970s, Swann had written that a cataclysm "that will bring current concepts of man to an end" would occur in 1985. Although the research sounded ridiculous, it did win some support. Jack Anderson, in a column written later in 1984, reports that an unnamed psychic on the remote-viewing project described details of the ultra-secret Soviet nuclear testing site at Semipalatinsk that were later confirmed by satellite photos. "No one in the U.S. intelligence agencies had known the equipment was there, so the information couldn't have been leaked to him," Anderson writes. The columnist credits another Grill Flame psychic with locating a downed Soviet bomber in Africa that the CIA was anxious to find.

But these kinds of "hits" are typical in the reporting of parapsychological phenomena. Where, for instance, are the thousands of reports that didn't pan out? The National Academy of Sciences panel, with access to all the data, found nothing extraordinary in the Grill Flame project or any other psi research.

Little had been heard from Geller in the United States in the years following his colleagues' confessions and other exposes of his techniques until the spring of 1987, when Pell and his counterpart in the House, Foreign Affairs Committee Chairman Dante Fascell (D.-Florida) and several of their aides caucused with Geller in a bug-proof room of the Capitol. Included on the agenda were supposed Soviet advances in psychic warfare, and what the United States could do to pull even. According to several news accounts, the two leaders were suitably impressed with Geller's abilities. Fascell, *Newsweek* quotes his press secretary, immediately "rushed out" to get the magician's autobiography.

Questions Remain

Three questions remain unresolved. First, is this wasteful research still going on? CSICOP fellow Ray Hyman, a member of the Academy panel, told me that he was unable to find out whether any projects like Grill Flame are currently underway. The Defense Department, the CIA, and DIA refused to answer my requests for information. A call to the person Hyman identified as the Pentagon's pointman on psi research elicited a string of "no comments."

Second, what role will Geller play in ensuring treaty compliance? It's hard to imagine Congress going along with Pell by putting the Israeli on the government payroll, although Geller claims in his book that he receives millions of dollars from prominent multinational corporations who use him to locate oil and other precious minerals. A refusal to hire the man would seem unjust, however. After all, he did go out of his way to meet with Yuli Vorontsov and Max Kampelman, chief arms negotiators for the superpowers, in 1987, at Pell's request. And the very next day Mikhail Gorbachev made his offer to eliminate medium-range missiles from Europe—for which Geller takes credit, of course.

And, finally, what does the Reagans' astrologer say about all this? \Box

The Skeptic's Bookshelf

Origins of Life, Freeman Dyson, Cambridge University Press, Cambridge, 1985, 81 pages, \$7.95.

Origins, Robert Shapiro, Bantam Books, New York, 1986, 332 pages, \$9.95.

Reviewed by Michael Hoffman

These two books on the origin of life are written on somewhat different levels. Dyson's book, based on lectures he gave at Cambridge University, is intended for a scientific audience, while Shapiro's is aimed more toward the general public. But both works express the view that the current paradigm in the origin-of-life field is unsatisfactory, and that the field needs new ideas.

Dyson briefly lays out what he thinks are the important experiments in the field so far (an embarrassingly short list), and then points out some of the difficulties with the dominant theory of the origin of life. That theory, roughly, is that inorganic processes created amino acids and nucleotides, the building blocks of life. A self-replicating RNA molecule then appeared spontaneously, and gradually evolved into something resembling a modern cell. Experiments have demonstrated prebiotic synthesis of many amino acids (the classic Miller-Urey experiment), and (under some rather special conditions) of nucleotides. Other experiments have shown that an RNA molecule can replicate itself without an enzyme. But, as Dyson points out, there is a large gap between these results. Further, it appears that the replication of a proto-gene, without the elaborate errorcorrection mechanisms used by living cells, would be so inaccurate that any selective advantage would quickly be lost.

Dyson proposes that the origin of metabolism preceded the origin of genes. In his theory, the first "living" things were populations of polymeric molecules confined to droplets. Dyson thinks of these populations as evolving not by selection, but by statistical fluctuation. Over time, many of these molecular populations might drift into more organized, active states. He sets up a simple mathematical model to describe this

situation, and concludes that this scenario is plausible for assemblages of 2000 to 20,000 molecules with 9 to 11 distinct types of monomers. This would work for proteins (there are 20 biological amino acids, and early life could have worked with a subset), but not for nucleic acids (there are only four nucleotides). The rest of Dyson's theory is more speculative. He suggests that early genes may have appeared as parasites in the protein droplets. Eventually these parasitic genes may have become symbionts, just as mitochondria and chloroplasts started out as parasites in Lynn Margulis's theory of the the origin of eucaryotic cells.

Shapiro's book, subtitled "A Skeptic's Guide to the Creation of Life on Earth," discusses not only the leading scientific theories of the origin of life, but also Biblical creationism and the eccentric ideas of Sir Fred Hoyle. One of its themes is that there is a difference between science and creation myths, and that a truly scientific theory of the origin of life must stand up to the scrutiny of logic and experiment. Shapiro finds some "scientific" theories on the subject deficient when measured by this standard. With regard to the dominant view that a protogene emerged spontaneously from prebiotically synthesized building blocks, Shapiro's views are somewhat similar to Dyson's. Shapiro is a chemist, and doubts that nucleotides could be synthesized prebiotically in significant amounts. Such syntheses have been done, but they require special conditions and produce very low yields. Even if a nucleotide were to be formed, it would easily break down. It is hard to imagine situations in which enough nucleotides could collect to assemble spontaneously into a proto-gene, and Shapiro suggests that the earliest form of life was based on proteins, with nucleicacid genes coming later. In his final chapter he urges new experiments, including investigation of exotic chemistries in other parts of the solar system.

I would recommend either book to anyone who thinks of the origin of life as a settled question. Shapiro's skeptical attitude is close to that NCAS seeks to foster. □

The First Millennium

By Guy W. Moore

In a little more than a decade the year 2000 A.D. will arrive. It might be instructive to review in brief the terrors that preceded the end of the Christian era's first millennium to prepare for the paranormal onslaught that seems to be on its way as the second millennium approaches.

Around the middle of the 10th century there appeared in France, in Lorraine and in Thuringia (now part of Germany), a recrudescence of the doctrine of the imminent end of the world. This movement can be traced with certainty from the year 958 in Paris and from 960 in Thuringia. We know that 10 or 15 years later the Catholic church was opposing the opinion of the coming of the Antichrist at the turn of a thousand years.

Our best contemporary source about the millennial fever is the much-traveled Burgundian monk Raoul Glaber—who "had known the year 1000, not through texts but by living it and feeling its wind in his face." Glaber was afraid that the end of the world was imminent because of the many portents and signs of damnation that he saw all about him. Among those signs was a comet that Glaber reports appeared in the month of September and remained visible for nearly three months, shining so brightly that its light seemed to fill the greater part of the sky. "What appears established with the greatest degree of certainty," he wrote, "is that this phenomenon in the sky never appears to men without being the sure sign of some mysterious and terrible event."

The calamities preceding the year 1000 were both real and imagined. Great famines became endemic and there were epidemics of St. Anthony's Fire (ergotism), a particularly loathsome disease caused by eating bread made from rye contaminated with the fungus ergot. (Victims of the disease suffered from severe burning pains and cramps in the limbs, followed by a long and painful stage of gangrene and eventual loss of the affected limbs.) Inflamed imaginations saw fiery armies fighting in the sky. A great meteor appeared, behind

(Continued on page 11.)

Twelve Ways To Spot a Quack

By Zev Remba

You're educated. You understand science. You'd be able to spot a quack—a promoter of an unproven therapy—a mile away. Or could you?

Quacks aren't the snake oil salesmen they were a century ago. Modern quacks cloak their ideas in the terms of science, playing on the notion that you're likely to want a cure for your problem so much that you won't carefully scrutinize their claims.

Take Dr. Lawrence Burton, who operates a clinic in the Bahamas and claims to cure cancer through Immunoaugmentive Therapy (IAT). Burton says cancer can be controlled by boosting the immune system through a series of injections of "protein fractions." The fractions, or mixtures, are made from other peoples' blood.

Hundreds of cancer patients made the trip to Burton's clinic to receive these fractions. Some experienced remissions; some didn't. Others returned home with something more: infection with the human immunodeficiency virus (HIV). While Burton had carefully prepared the fractions, he had overlooked testing them for the presence of HIV antibodies.

On closer inspection, Burton's seams begin to show. He isn't a physician, but a zoologist. Successful tests of IAT have been conducted only in fruit flies, not in animals. And Burton hasnever published a paper on IAT in a peer-reviewed medical journal. Still, patients continue to go to his clinic, and the Bahamian government won't shut him down because he brings revenue to the island.

Quack therapies sell not because of the quality of the products, but because of the quack's ability to influence his audience. (While not all quacks are men, for the sake of simplicity I refer to them here as "he.") He presents his ideas in forms that appeal to patients. But if you scrutinize his claims, you can find the seams. Quackery experts Stephen Barrett, M.D., and Victor Herbert, M.D., J.D., offer the following tips for discerning a quack from a real expert.

- 1. He uses anecdotes and testimonials to support his claims. Be skeptical about claims of miracle cures for arthritis, cancer or any other chronic disease. Those giving the testimonials may not actually have had the condition they name. Also, many diseases are self-limiting and have periods of remission. Establishing medical truths requires careful and repeated investigation, not reports of what people imagine might have taken place. Psychosomatic symptoms (bodily reactions to tension) are often relieved by any product taken with a suggestion that it will work.
- 2. He promises quick, dramatic, miraculous cures. These promises are usually subtle or couched in doubletalk, so he can deny making them when federal or state officials close in. Quacks do not keep count of how many people they lure away from proper care, nor how much false hope they have sold.
- 3. He uses disclaimers couched in pseudomedical jargon. Instead of promising to cure disease, some quacks promise to "detoxify" your body, "balance" its chemistry, release its "nerve energy," bring it in harmony with nature, or "strengthen its immune system." The quack never makes before-and-after measurements of these things. Since it is impossible to measure the process the quack describes, it is difficult to prove him wrong.

- 4. He displays credentials not recognized by responsible scientists or educators. "Degrees" from unaccredited schools are rarely worth the paper they are printed on. Quacks also tend to form their own "professional" organizations, which replace critical peer review with mutual tolerance of unproven practices.
- 5. He encourages patients to lend political support to his treatment methods. Quacks place political endorsement and public support ahead of scientific acceptance. Despite lack of evidence that his method works, a quack may seek to legalize his treatment and force insurance companies to pay for it.
- 6. He says that most disease is due to faulty diet and can be treated with "nutritional" methods. Most medical experts say that the majority of diseases have nothing to do with dietary deficiencies, aside from well-researched guidelines on calcium, fat, and dietary fiber intake. Many of the problems quacks diagnose are considered rare or even nonexistent by responsible practitioners; "mercury toxicity" and "candidiasis hypersensitivity" are two examples.
- 7. He claims that fluoridation is dangerous. Quacks are often more interested in imagined deficiencies than in real ones, such as the value of community water fluoridation in building decay-resistant teeth and strong bones.
- 8. He claims that sugar is a deadly poison. Many recent books and magazine articles assert that sugar is "the killer on the breakfast table" and is the underlying cause of everything from heart disease to hypoglycemia. The fact is, however, that sugar is perfectly safe when used in moderation in a normal, balanced diet. If you ate no sugar, your liver would make it because your brain needs it.
- 9. He recommends that everyone take vitamins, "health foods," or both. Food faddists belittle the "Basic Four" of good nutrition. But they rarely tell you that they earn their livings through product endorsements, sale of publications, or financial interests in vitamin companies and firms that manufacture the food supplements and equipment they promote.
- 10. He claims he is being persecuted by organized medicine and that his work is being suppressed because it is controversial. He may also claim that medical groups oppose him because his "cure" would cut into their incomes. Today, however, many doctors are involved in HMOs or other health plans that pay them the same salary whether or not their patients are sick. Keeping their patients healthy reduces their workload, not their incomes.
- 11. He sells a product or machine that he claims is endorsed by the FDA. It is against the law to say or imply that the U.S. government endorses any nonprescription drug or medical device.
- 12. He supports his claims with reports from the mass media, rather than with reports of controlled studies published in reputable peer-reviewed journals. Any medical cure should be reproducible by scientists using the same procedure. Scientists with valid claims are more than willing to share their findings with the rest of the scientific community, while pseudoscientists often claim to have "secret formulas."

For more information on quackery, fringe medicine, and unproven therapies, contact Zev Remba, chairman of the NCAS Fringe Medicine SIG, at (202) 842-1130 (office) or (703) 522-3468 (home).

News From Other Skeptics Groups

By Lee J. Rickard

As part of its services to local affiliates, CSICOP collects multiple copies of newsletters from each group and distributes them to the other associations. In addition to maintaining these as a resource file, we try to cull items likely to interest our membership. As the number of local skeptics' associations is on the increase, and the established groups are putting more effort (or at least more words) into their newsletters, the occasional mail packs from CSICOP are becoming downright daunting.

We note with pride that excerpts from the *Skeptical Eye* have begun appearing in other newsletters. Julie Stern's account of NCAS's first general meeting, with its close encounter between Phil Klass and Bruce Maccabee, appeared in the June issue of *BASIS*, the (San Francisco) Bay Area Skeptics Information Sheet. April's session with Naptha, the spiritual channel of NCAS thaumaturge Jamy Swiss, was picked up by the July/ August issue of *KASES File*, the Journal of the Kentucky Association of Science Educators and Skeptics.

BASIS (August 1988) reports on a story in the San Francisco Examiner by Keay Davidson on the declining fortunes of parapsychology. It may be because of the more restrictive federal funding climate. It may be because of the recent, very negative report on "human potential studies" by the National Research Council (which found "no scientific justification, from research conducted over a period of 130 years, for the existence of parapsychological phenomena"). It may be because of the dogged labors of CSICOP. Whatever, the effect has been the loss by several major laboratories of grants both public and private. The Pentagon has cancelled a two-year, \$425,000 study. A private \$300,000-a-year grant to Charles Honorton's lab at Princeton has been cancelled. Parapsychologists have attributed their troubles in part to confusion between legitimate research and wackier fads, such as plant communication, and to a campaign of bias attributed largely to CSICOP's Ray Hyman, who worked on the NRC report.

The *British and Irish Skeptic* reports the passing of Tim Dinsdale, of a heart attack on December 14, 1987. On April 23, 1960, Dinsdale filmed an object moving across Loch Ness that he claimed was the long-sought monster. The film was broadcast by the BBC and apparently endorsed by the Photographic Interpretation Unit of the Joint Air Reconnaissance Intelligence Centre. Skeptics, notably Steuart Campbell and Ronald Binns, have identified the mystery object as a motor boat. Dinsdale was firmly convinced, though, that he had recorded the elusive Nessie, and began a personal (and usually solitary) surveillance of the loch that lasted for decades.

The Rational Enquirer (June 1988) notes contributions by British Columbia Skeptics Gary Bauslaugh and Barry Beyerstein to a debate on parapsychology in an upcoming issue of the journal *The Behavioral and Brain Sciences*. The journal is expected to include review by V. K. Rao and John Palmer (propsi) and James Alcock (anti-psi), plus commentaries by other interested parties. Watch for it in your library.

The BC Skeptics are currently working with the British Columbia Civil Liberties Association in a campaign against the

use of graphology for personnel decisions by several local municipalities. In a report in the *Rational Enquirer*, Dale Beyerstein discussed the potential for abuse of civil liberties entailed by the use of this pseudoscientific technique. One chilling example: a graphologist "tested" employees of the Vancouver School Board and reported that eight of ten were potential or actual pedophiles!

Graphology is also the concern of North Texas Skeptic John Thomas. In the July-August 1988 issue of that group's journal, The Skeptic, Thomas says that he became interested in handwriting analysis after reading an article in the Dallas Times Herald that claimed that some 2,000 American companies use graphological methods to evaluate prospective employees. He is investigating its use in the Dallas-Fort Worth area, and the general problem of legal issues raised by the use of pseudoscientific employment tests. This is, of course, related to an important local issue for NCAS—the use of polygraph tests on federal employees.

The North Texas Skeptics are located in a hotbed of creationist activity, and so are heavily involved in creation/evolution debates. *The Skeptic* features along article by NTS member Ron Hastings, describing his experiences accompanying a Creation-Excavation Seminar last December. The event included afternoon visits to the site where creationist Carl Baugh claims to have found a human tooth embedded in lower Cretaceous limestone. Hastings has identified the tooth as probably belonging to a pycnodont (a fish). Their argument over the specimen (during which Hastings found other pycnodont samples on site) was captured in part by a PBS crew collecting footage for an upcoming *NOVA* show on creationism.

Finally, we must report a truly remarkable paranormal phenomenon in Wales, as reported by *The Sun* (Sydney) on January 15, and reproduced in the Autumn 1988 issue of *The Skeptic* (published by the National Committee of Australian Skeptics, Inc.):

"Four Welsh schoolgirls became pregnant within weeks of sitting in an innocent-looking office chair.

"Three of the women working at Cardiff Arts Marketing have had babies in the past year and the fourth is pregnant, after they all sat in the same office 'fertility' chair.

"One of the chair's 'victims', Anya Tinsley, 29, now three months pregnant said: 'I thought nothing of the chair when I started work, then found myself pregnant almost straight away.'

"'Our male colleague, Peter Bradshaw, will be allowed to keep the seat from now on—it can't do him any harm."

Volunteers Needed!!

We need about 10 volunteers to help put on NCAS's annual meeting on Sunday, October 16. If you can help take tickets, run errands, set up and serve refreshments, or if you have access to videotaping equipment or can operate a video camera, please contact Doug McNeil at (703) 527-6781 (evenings only). Volunteers will be admitted free!

Newspaper Editors Are Dummies

By Michael Zimmerman

Within the past two decades people have come to realize that scientists are no less fallible, no more moral, and no smarter than any other segment of society. Scientists have rightly been removed from their pedestals and integrated into the mainstream. And yet in our increasingly technological world the gulf between the scientist and the nonscientist has been growing steadily. Basic scientific knowledge seems to be decreasing, while the acceptance of such pseudoscientific ideas as astrology, "creation science," parapsychology, and pyramid power is growing. Under such conditions it is difficult for a democratic society to make rational policy and educational decisions pertaining to scientific matters.

Just how widespread is this general phenomenon of scientific ignorance? Parts of a recent study helped me to determine the magnitude of the basic misconceptions held by one educationally elite group of people: newspaper editors. By questioning the managing editors of the nation's daily newspapers, I was able to gain a glimpse into their views on scientific issues. What I saw was not in the least encouraging.

Only 51 percent of the nation's daily newspaper editors responding to my survey (534 of 1,563 editors responded) disagreed strongly with the statement: "Dinosaurs and humans lived contemporaneously." Despite memories of Dino, Fred Flintstone's pet dinosaur, the fact is that humans and dinosaurs missed each other by millions of years. Slightly over 37 percent of the editors, nonetheless, either agreed that dinosaurs and humans coexisted or stated that they had no opinion on the topic. Just in case you're an urban chauvinist, let me assure you that there were no differences in the responses of editors from large and small newspapers.

Editors had equally serious problems when asked about the Earth's chronology. A full one-third of the respondents did not disagree strongly when presented with a statement that said, "The Earth is approximately 6,000 to 20,000 years old." Similarly, only 42 percent of the editors agreed strongly with the statement, "The Earth is approximately 4 billion to 5 billion years old." Although surprising numbers of people may not be aware of it, over the past centuries we have learned that the Earth is round, revolves around the sun, and is extremely old (approximately 4.6 billion years).

Several of the questions touched on issues that can be considered to have religious implications. Only 41 percent of the editors strongly disagreed with the statement that "Adam and Eve were actual people," while only 57 percent strongly disagreed that "every word in the Bible is true." That newspaper editors feel this way is particularly odd since a recent study has shown that 77 percent of the clergy of the American Lutheran Church does not accept Biblical inerrancy, while even 24 percent of the far more conservative Lutheran Church-Missouri Synod clergy also does not accept inerrancy.

Perhaps most puzzling is the fact that only 48 percent of the editors strongly disagreed when presented with the contention that "most scientists are atheists." This response suggest that

most newspaper editors believe two things: that scientists are different from the rest of the American public in some fundamental way and that science and religion are incompatible with one another. Neither belief has any basis in reality.

Other than allowing us to snicker at the newspaper editors who many feel have been so self-righteous during this political season, why are these results newsworthy? My study is important because newspaper editors represent an educated segment of our society. When this "elite" group retains such an unsophisticated view of science, we can be certain many other groups are at least as unsophisticated. Consider that Arizona Governor Evan Mecham's chief aide for educational matters, Jim Cooper, testified before a legislative committee in February 1987 that teachers should not impose their belief that the Earth is round on students who have been brought up to believe that it is flat.

We do have a pressing problem when people take Fred Flintstone more seriously than Carl Sagan. Scientific and technological advancements are based on knowledge rather than mere opinion. As a society, we put ourselves in a precarious position when we do not have a solid core of basic scientific knowledge; we weaken the quality of our technological decisions while increasing the potential for political abuses in the name of science. The recent history of the Soviet Union provides a striking example of just this situation. T.D. Lysenko, the most dominant voice in Soviet genetics from the mid-1930s to the mid-1960s, held that basic Mendelian genetics had too many capitalistic overtones. He demanded that all genetics research in the Soviet Union conform to Marxist ideology. One result of his position was the devastation of Russian agronomy and a legacy of wheat shortages continuing to the present day.

I recognize the fact that half of the newspaper editors in this study were uncertain that the age of dinosaurs preceded the age of mammals by millions of years does not mean that American science and American society are in decline. My survey results should, however, place us on notice. It is imperative that members of our democratic society possess enough scientific sophistication to enable them to make rational choices about increasingly pervasive scientific issues. Unfortunately, preliminary indications suggest that many American newspaper editors have not yet achieved that level of sophistication. \square

(Michael Zimmerman is a professor of biology at Oberlin College. This article originally appeared on the editorial page of The Washington Post on January 26, 1988. Copyright The Washington Post.)

MOVING?

Don't leave NCAS behind! Send the mailing label from this issue of the NCAS Skeptical Eye, plus your new address, to:

Grace Denman 8006 Valley Street Silver Spring, MD 20910.

Please allow four to six weeks for delivery.

The First Millennium, from p. 7

which was seen a dragon with blue feet and an ever-swelling head that frightened even those who remained in their homes.

Of course, when the world did not come to an end in the year 1000, the doom-sayers were undismayed. Glaber was to carry his millennarianism into the next century—speaking of the famine of 1033, he wrote that "men feared that mankind would end." In that year in Gaul there were still men who believed that the end of the world was approaching.

There is one remarkable aspect to these terrors. There is no trace of them in the official documents of the times. Yet from the middle of the tenth century and all through the eleventh there is compelling evidence that many people believed in the approaching end of the world. While the church and the statesmen were about the business of trying to midwife a new Europe, it is apparent that members of society's lower strata—the little people of the time—were obsessed by an ill-defined fear.

In fact, we glimpse the torments of the multitudes through the bright lighting and the indifference of the great. The Middle Ages were astir. From the end of the tenth century we can begin to recognize the pattern of nations that we see on today's map of Europe: France, Italy, Germany, and England. In the year 1000, Christianity reached Iceland and the Church was well on its way to becoming the strongest single influence in a new Europe. The tenth century was a time of change, when the word "renovation" was heard as often as the prophecies of doom. In 1030, even Glaber briefly permitted himself to see a world where "the pure white robe of the churches" was being put on.

The historian Henri Focillon (1881-1943), in attempting to summarize what the pivotal year 1000 meant to him, explained the disparity:

It may behoove us to recall...that a period or a society is not entirely of a piece, but consists of several levels of humanity—in short, to propose a kind of moral geology. On the oldest level we find the man of prehistory, always present and hidden, bluntly exposed at moments by the convulsion of time.... To a more peaceful and more mysterious region, but also stemming from the dim past, belong the faithful of ancient secular cults... that have been preserved down to our time in folklore. Above these are the middle strata of Christianity, abounding with

eaffected by the errors of the masses.... In any event, it is certain that the effort to organize the West, which was made during this period, grew out of altogether different human soil from that which could have nourished this tormented psychology.

The waning years of this century will provide an unprecedented opportunity to test Focillon's geologic layers of society hypothesis. How persistent is the man of prehistory? What of the middle strata of Christianity, "abounding with emotional appeal?" We know that it is alive and well; if it should take up the millennial cry it could create widespread terror by "spreading the word" through its television ministries. And surely in our time, if terror returns, it will be heard and trumpeted by the rest of the media, beginning with the supermarket tabloids!

It will be especially exciting if a bright comet (one is long overdue) or a supernova more accessible than the one in the Large Magellanic Cloud in 1987 should appear in the late 1990s. And what if the astrologers—in the interest of swelling revenues—take up the cry of an impending world's end? The events of the first millennium provide a backdrop against which we can watch whatever develops with greater interest and understanding. \square

For a millenial bibliography, see p. 12.

Time to Renew!

NCAS's charter membership period ended on September 30, and it is now time for most of us to renew our memberships. If you haven't already received a renewal notice in the mail, you'll be getting one soon.

During the past year and a half, NCAS has held a public meeting on UFO abductions and a forum on fringe science in the courts, and has worked to build contacts with the media and other professional groups. We are already the third largest local skeptics group in the United States!

In the coming year, we will host a forum on fringe medicine at our annual meeting (see notice in this issue) and plan to hold a panel discussion on astrology in December. We also plan to greatly increase Special Interest Group activities, and encourage members to become more involved through these SIGs.

Continue to support NCAS: If you haven't already done so, renew your membership today!

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Membership/Renewal Form					
Yes, I agree with your purposes in explorir	ng paranormal and fringe-science claims from a	Single:	@ \$20.00		
of such inquiries to the scientific community	nsible, scientific point of view, and to disseminate factual information about the results chinquiries to the scientific community and the public. I understand that my membership be good for one year and will include a subscription to the NCAS Skeptical Eye.				
Check particular areas of interest: Astro- Education, Fringe Medicine U	ology Communications Creationism FOs Other (list below)	Notorinormoniparados	_@ \$10.00		
Make checks payable to	NAME				
NCAS and mail to:	STREET	APT #			
Grace Denman 8006 Valley St.	CITY	STATE	ZIP CODE		
Silver Spring, MD 20910	*STUDENTS: LIST INSTITUTION ATTENDING:				

Annual Meeting, from p. 1

You'll get the latest information on the fast-growing area of unproven AIDS and cancer therapies from Grace Powers Monaco, a Washington, D.C., attorney. Monaco represented the American Cancer Society from 1977 through 1982 in landmark cases against laetrile, and continues to litigate against and investigate promoters of unproven therapies.

New York City dentist Marvin Schissel, D.D.S., author of *Dentistry and Its Victims*, will reveal how quackery has made its way into everyday dentistry, and how patients are injured by it. He'll examine claims that silver fillings cause multiple sclerosis and infertility; attempts to cure gynecological and systemic ailments through treatment of the jaw; cranial osteopathy; auriculotherapy; and more.

Popular misconceptions about diet, nutrition and exercise will be explained by Silver Spring sports medicine expert Gabe Merkin, M.D. Merkin also will examine fad diets and the use of certain foods and drinks to boost performance.

Geoffrey Drucker, J.D., of the U.S. Postal Service's consumer protection division will discuss recent USPS prosecutions against quacks and promoters of unproven therapies and the difficulties linked to catching them. Drucker recently completed the successful prosecution of Kurt Donsbach, operator of mail-order degree mills in several states used by numerous quacks.

After the program, NCAS will host a reception from 5 to 6 p.m. All members and their guests are welcome to stay for refreshments and conversation with speakers and other NCAS members.

The Uniformed Services University of the Health Sciences is located on the grounds of the Bethesda Naval Hospital. (See the map on page 1.) To get there by car, enter from Jones Bridge Road at Grier Road (at the light). (This is the back entrance; the front entrance is closed on Sunday.) Follow the signs to the parking garage; you can park inside free, but will have to check in with the security guard. The auditorium is one flight up. You can also get there by Metro; take the Red Line to the Medical Center stop. It's about a 10- to 15-minute walk.—Zev Remba \square

"The most costly of all follies is to believe passionately in the palpably not true."—H.L. Mencken

A Millennial Bibliography

By Guy W. Moore

For more information on the last millennium, see:

Barraclough, G. 1976. The Crucible of Europe: The Ninth and Tenth Centuries. University of California Press.

Duckett, E. 1967. Death and Life in the Tenth Century. (Duckett observes that superstition is hydraheaded and never dies.)

Focillon, H. 1969. *The Year 1000*. Harper Torchbooks. (This last work of the great art historian provides the most detailed account of the millennial year. I have generally followed his account here.)

Guthrie, D. 1946. A History of Medicine. Lippincott.

Lopez, R.S. 1959. The Tenth Century: How Dark the Dark Ages? Reinhart.

Ottewell, G. and F. Schaaf. 1985. *Mankind's Comet*. (Incidentally, Chinese and Japanese records show no comet between February 998 and February 1001.)

Mushrooms, from p. 4

I have examined descriptions of fairy ring mushrooms in a number of books and found that these descriptions vary considerably. Some of these descriptions can be found in Vincent Marteka's Mushrooms: Wild and Edible and in The Wonderful World of Mushrooms and Other Fungi by Helen Pursey.

I have found no evidence that these fungi poison grass. In fact, their mycelia are good fertilizer. These fungi are not a satisfactory explanation for places where grass does not grow: another explanation must be found. We should not overlook the possibility of unsuitable soils or harmful chemicals.

Voices From the Skeptic Tank

NAPTHA SPEAKS

Even spirit guides take vacations. Naptha has been in mothballs. But he did leave Jamy Swiss the following message for NCAS members:

NAPTHA'S BIRTHDAY HOROSCOPE

(For persons born under the sign of Libra):
A SURPRISE IS IN STORE FOR YOU!
ALSO, LIMIT YOUR CALORIC INTAKE.

Bulk Rate U.S. Postage Paid Permit No. 895 Metrifield, VA