

Quote of the Month:

"Another Blow Weakens EMG-Cancer Link. -- Perhaps the most plausible piece of laboratory evidence linking electromagnetic field (EMF) exposure to cancers has just become much less plausible. This area is rife with tenuous connections, but work suggesting that low-level EMF exposure can dramatically affect the workings of the Myc gene, an oncogene implicated in a host of human cancers, has stood out as stronger than most. Now, however, two elaborate attempts to replicate the findings have failed completely."

Gary Taubes in Science Vol. 269, 1995

1. Meeting began at 11:30 am and adjourned at 1:20 pm.
2. Members present: Breed, Carney, Cherington, Collier, Cosgrove, Cusack, Fischer, Gustafson, Hodge, Keen, Kithil, Lammertse, Langford, Rossie, Scott, Simmons, Stevenson, Speed, Wachtel, Yarnell.
3. New Members:
 - Dean L. Cosgrove of Windswept Enterprises, 109 Pine Street, Log Lane Village, CO 80705-4847 Phone 970-867-4304
 - Dayna Scott of Vermont. Friend of Ken Langford.
 - Bruce L. Stevenson of Provenant St. Anthony Hospitals
 - Mary Pat Speed of Provenant St. Anthony Hospitals
4. The meeting was held in our new larger, more comfortable "home" in the Main Auditorium. Thank you Peggy Gustafson and Melissa Carney.
5. I distributed a flyer about the Colorado Trauma Institute's 12th Annual Colorado Trauma Symposium to be held on August 1, 2 & 3 1996 in Breckenridge. There will be topics on lightning injuries and burn treatment. I shall be a participant at that meeting. Jill Allen of the Colorado Trauma Institute mailed the information to me. I also made an announcement of the March meeting of the American Meteorological Society (Denver-Boulder Chapter) at NCAR in Boulder on March 11, 1996. Wendy Abshire sent me that flyer.
6. Phil Yarnell presented information on 3 patients who were struck by lightning:
 - a. One man from Colorado Springs was struck on 3 separate occasions. He has memory loss.
 - b. The patient who, 19 months ago, received a direct strike to the head is living in a care facility. He has presents encephalopathic changes with memory loss, disorientation, and confusion.
 - c. A 25 year old construction worker was struck while working in the Glenwood Springs Canyon on October 12. He has been unable to return to work because of many symptoms that resemble post-trauma syndrome. Phil and Howard Wachtel discussed the possible etiologies of these type of cases. As in many other cases, all tests and imaging studies are normal or nondiagnostic. Howard mentioned that MEG (magnetoencephalogram) might be more informative than EEG (electroencephalogram) studies.

Phil also stated that he has been in touch with several coroners in the state. He has reviewed 3 fatal cases with the Routt County Coroner.

7. Howard Wachtel announced that his group will be present 4 papers at an upcoming meeting in Victoria, BC. Two of these papers discuss the question of EMF and possible relationship with cancer. Howard asserted that there is no convincing evidence that the two are related in a casual way. He pointed out that one of their papers points out that the high configuration cases may be related to other factors such as traffic patterns and environmental toxins in the neighborhood. He also discussed how electrical transients may affect human physiology included changes in heart rate. There is data to support the idea that if electrical current is introduced at the time the heart is in its contraction phase (during systole) cardiac damage is less likely to occur. Contrariwise, it may be more dangerous if the heart is in its resting phase.
8. Dean Cosgrove showed a videotape of lightning which he captured during a storm in Lawton, OK. The tape was remarkable with lightning striking the ground within 100 feet of a utility pole. On slow motion, the viewer could see the "beading" of the lightning.
9. Rich Kithil provided copies of updated lightning safety tips for the Colorado Golf Association from National Lightning Safety Institute. Rich gave a synopsis of an article in today's Denver Post by M. W. Browne on the subject of the "beginning of life on earth." According to the article the primitive earth was an RNA world. Thomas Cech of the University of Colorado discovered that RNA molecules, without help of outside enzymes, could split and splice together in a new arrangement. The article reviews the experiment done in 1953 by Miller and Urey when a mixture of methane, ammonia, carbon dioxide, hydrogen, and water vapor was exposed to electrical energy (? lightning) amino acids were formed. Recent experiments by Miller and Robertson demonstrate that two vital pieces of RNA, cytosine and uracil, can be formed in sea water after lightning strikes.

Rich also reported from a NASA newsletter that optical detectors can be used to spot tornadoes from space. The lightning flash rate can be used as method of spotting tornadoes.

Next week, Rich will be an expert witness in a court case pertaining to a fatality on a golf course. Rich stresses that golf courses and sailing associations have a responsibility to warn people of impending recognized danger.

Finally, Rich reported that he and Rich Collier are working on a project for the Department of Defense to protect waste storage sites.
10. Rich Collier related that Rich Kithil, Mike Foley, Dick Fischer, and he have been providing pro bono evaluations of the lighting/electrical safety situation at St. Anthony Hospital. He estimates that the evaluation may take several months to complete.
11. Rich Keen said that he will discuss lightning in Seminar for municipal workers in Colorado Springs.
12. Warren Simmons announced that the Golf Association will provide a booth at an upcoming Colorado RV Show at the National Western Stock Show Building. Warren stated that because of a busy schedule this season, he has to decline applying to the NFPA. We decided to ask Michael Foley, Ron Larson, and Jerry Cusack to chose another possible candidate.

13. Ken Langford commented that an AM radio set at the signal of a strong radio station can function as a lightning detector. Dean Cosgrove brought a hand held lightning detector that uses radio frequencies to measure possible approaching lightning. Jerry Cusack observed that he has a metal detector that responds to lightning activity. Rich Kithil warned that lightning detectors may provide one with a false sense of security. He believes that relying on the flash/bang system may also provide a false sense of security.

Ken distributed pages from a recent foreign language directory that gives the name for lightning in 26 different languages.

Ken reported that he has been speaking with Martin Uman about the lightning safety bag and triggered lightning experiments that might be performed later this year.
14. George Hodge reported that he now performs forensic work with the Phoenix Company.
15. George Rossie passed around a flyer regarding an "Electricity and Behavior Conference" in New York City in May 1996. Several topics deal with the use of EST (electroshock therapy).
16. Dan Lammertse participates with an Insurance Rehabilitation Study group which looks into claims. Dan will be speaking on lightning to this group in Phoenix in 2 months.
17. Jerry Cusack told us that The Learning Channel (Channel 95) recently had a show on lightning that was well produced.
18. Next meeting: April 12, 1996, Friday at 11:30 am in the MAIN AUDITORIUM!! of St. Anthony Central Hospital.

Wishing everyone a Happy Beginning to Spring,



Michael Cherington, MD
Chair, LDC

Corrections, Changes and Additions to our Directory:

Michael Cherington's Email address is [MICROPHT @ aol.com](mailto:MICROPHT@aol.com)

Rich Kithil's Web Site is
Internet WWWeb: <http://www.lightningsafety.com>

Please make the following corrections to your "Lightning Data Center Membership List":

1. Dr. Michael Cherington's CORRECT EMail Address is: microph@aol.com
2. Rich Kithil's NEW Web Page is: <http://www.lightningsafety.com>

If your address, phone number, Email, etc. has changed or is listed incorrectly, please call Melissa Carney at (303) 629-4258.