

LIGHTNING DATA CENTER MINUTES

August 13, 2021
ST. ANTHONY HOSPITAL
www.lightningdatacenter.org

Monthly Quote: “If we could tinker with the nerves so that exciting the ear, activated the brain center concerned with vision, and vice versa, then we would 'hear the lightning and see the thunder.’” William James per Michael Cherington, email dated 1/10/10

Members present: Members present: Langford, Rossi, Swanson, Wachtel, and Yarnell.
Langford moderated. Meeting began at 11:48 AM and ended at 1:04 PM.

1. **VERY IMPORTANT – PLEASE READ!** As of August 2021, we will continue to hold meetings via Zoom only. The number of COVID cases here in Colorado has risen in parts of Colorado and the nation. There are still concerns about the spread among younger people and those who are not vaccinated or partially vaccinated. The Delta variant of COVID now appears to be the dominant strain of the virus. At the present, masks in Colorado are recommended but not required. Local governments and business will be able to require mask use as they wish; however, indoor mask use is required for unvaccinated or partially vaccinated in certain places.
2. The LDC is accepting donations, either as cash or check. If you donate via check, please make your check payable to Steve Clark at 755 S. Clinton Street, #2A; Denver, CO 80247. He will cash the check and keep the cash holdings specifically for the LDC. When the LDC incurs expenses, Steve will pay for services rendered through his bank account using the cash from LDC’s cash holdings. A log will be maintained detailing the inflow and outflow of monies. At the present, the LDC has \$682.00 in cash. LDC wishes to thank Woody Widmer. Barb Stemple knows him and he has graciously donated \$250 to help cover Barb’s expenses for the brochure. LDC would also like to thank Michael Cherington for a donation of \$50.00.
3. Next year in 2022, the LDC will be hosting the 33rd Annual Conference of the Lightning Strike & Electric Shock Survivors International (LS&ESSI). The questionnaire has been revised and it will be sent to members of LDC and LS&ESSI to find out how many people may attend and what is most important to them. Our tentative dates are June 16-18, 2022.
4. The ICOLSE 2022 call for papers is open until November 1, 2021. Papers can be sent to icolse22@gmail.com or organization@icolse2022.org. The conference website, www.icolse2022.org is still being worked on.
5. Dr. George Rossie presented a case. An airport worker in Florida was injured in 2017 while he was disconnecting the wired communication connection between a jet airplane and the ground crew. Airport surveillance video (See link below) shows the flash from two angles. Between the two camera angles we can see four paths to ground: at each of the three wheels and through the airport worker who is close to the nose wheel. George is serving as an expert witness on a PTSD suit. Now, four years later, the patient is experiencing chronic kidney stones. Phil says he has not heard of this specific sequela in any other lightning injured person.

6. Dr. Phil Yarnell presented two cases. Phil's Case #1: A male encountered a close flash on a covered porch (while sitting on a metal chair) in the Midwestern US this summer while watching a thunderstorm. He was 18" from the exterior wall of the house, and 6' from the open edge of the porch with a fixed roof above that edge. At the time of the flash, his "muscles clenched" and the hairs on both sides of his body stood out – more so on the right side. His extremities tingled for more than an hour. There was no evidence of burns. In the following month he experienced nausea and balance issues, as well as cognitive difficulties. Previous to the strike, the patient was being treated for hypertension. Now, in the wake of the encounter, his hypertension symptoms seem to have gotten worse, and he questions whether the flash had an impact on those symptoms. Phil asked the group whether they had ever heard of aggravated hypertension in lightning injured people. None of the assembled had heard of such a case. Langford recommended he check the chair for magnetic artifacts, and examine the physical environment to the right of his position for evidence of lightning insult. It was suggested that in the absence of burns the mechanism of injury may be related to electromagnetic induction and/or blast effect.

For another discussion of a person struck while sitting on a balcony please see the September 2019 minutes that can be found here:

<https://www.lightningdatacenter.org/wp-content/uploads/2019/09/2019-09.pdf>

7. Phil's Case #2: A woman was referred to Phil whose son had been injured by lightning. He was invited to contact Phil directly, and this was several years ago. The son never did reach out. As anticlimactic as this report was, it led to an interesting discussion of Post Electrical Shock/Lightning Strike Syndrome. Phil reminded us that Andrews, Reisner, & Cooper have been trying to get a formal DSM code for this syndrome (see link below), so that it can be broadly recognized by medical professionals and the insurance industry. Phil noted that a cluster of common complaints among a patient population constitutes a syndrome. Some examples for lightning are temperature dis-regulation, where a patient may become more or less sensitive to cold or heat; and barometric sensitivity, where the patient may become more physically aware of changes in the weather. In reference to the above discussions, aggravated hypertension & chronic kidney stones were thought to be uncommon to the syndrome.
8. The discussion of Post Electric Shock/Lightning Strike Syndrome led to a side discussion of so-called Punch Drunk Encephalopathy – common among boxers and football players. It seems possible that the blast effect of lightning could be related. Rossie pointed out that many patients in the sports category also used steroids and other abused drugs, so it can be difficult to discern which insults result in which sequelae. Some further resources were mentioned:

BOOK: Dr. Bennet Omalu - *Truth Doesn't Have a Side: My Alarming Discovery About the Danger of Contact Sports*

Changa, A., Vietrogoski, R. and P. Carmel, 2018: Dr. Harrison Martland and the History of Punch Drunk Syndrome. *Brain*. January 2018.

Link: <https://academic.oup.com/brain/article/141/1/318/4774567>

WEBSITE: *Madness and Memory* by Stanley B. Prusiner.

<https://ind.ucsf.edu/madness-and-memory-0>

9. Finally, two brief reports: Carl Swanson reported a male in Tennessee was indoors using a wired video game controller when lightning struck and impacted him via the wired connection; and an email from John Jensenius, Lightning Safety Specialist with the National Lightning Safety Council, reported the 7th 2021 United States lightning fatality, having occurred in the Bronx on 8/12/21. Please see the link below.
10. LDC welcomes your medical questions. Please send them via e-mail to Steve Clark at sclarktoto@gmail.com. Your medical questions will be forwarded to Dr. Phil Yarnell for his review and will usually be taken up for discussion in the next month's meeting. Please be advised any questions posed are for the general consideration by the group and do not constitute a formal medical opinion. If a formal evaluation is requested, arrangements can be made directly with Dr. Yarnell. If you have a medical emergency, please call 911 or your local EMS.
11. Questions, comments, error notifications, and critiques of these minutes are welcome. Please forward those to Steve Clark. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
12. LDC Disclaimer: These minutes do not represent official positions of the LDC or its members. They simply reflect the comments made at the meeting. Furthermore, the LDC does not implicitly or explicitly recommend or endorse any product or service. Any product or service presented in these minutes is done so for purposes of discussion and analysis. The merit (or lack thereof) is open for the consideration and review by the entire membership.
13. Next meeting: Zoom meeting. Friday, September 10, 2021, from 11:45 AM to 1:00 PM MDT.

Respectfully Submitted,
Kenneth Langford
Mr. Random Enterprises, Inc.

Lightning Links

This is a monthly listing of periodicals, websites, and videos about lightning and allied areas from a variety of sources. A headline or description is listed, followed by the link. Please note that some of the links are perishable, which means you'll need to go to the source for the information.

Rosen, Y., 2021: Scientists Stunned by Rare Arctic Lightning Storms North of Alaska. *Reuters*. July 17, 2021. Link: <https://www.reuters.com/world/scientists-stunned-by-rare-arctic-lightning-storms-north-alaska-2021-07-16/>

Holzworth, R., J. Brundell, M. McCarthy, A. Jacobson, C. Rodger and T. Anderson, 2021: Lightning in the Arctic. *Geophysical Research Letters*. March 22, 2021.
Link: <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020GL091366>

Mathews, Z., 2021: Lightning Strike Leaves Impression on Brush, Colorado Golf Course. *KOOL1079.com*. July 21, 2021.
Link: <https://kooll079.com/lightning-strike-brush-colorado-golf-course/>

Breslow, J., 2021: Man Suffers Shock Through Video Game Controller After Lightning Strike in Roberston County. *WKRN-TV*. August 1-2, 2021. Link: <https://www.wkrn.com/news/man-suffers-shock-through-video-game-controller-after-lightning-strike-in-robertson-county/>

Levine, D., 2021: Garth Brooks' Sold Out Nashville Stadium Concert Postponed Amid Severe Lightning Concern. *Popculture.com*. July 31, 2021. Link: <https://popculture.com/country-music/news/garth-brooks-sold-out-nashville-stadium-concert-postponed-severe-lightning-storm/>

Gill, J., 2021: Garth Brooks Concert at Nissan Stadium Postponed Due To Storms. *WKRN-TV*. July 31 and August 1, 2021. Link: <https://www.wkrn.com/weather-headlines/severe-weather/garth-brooks-concert-at-nissan-stadium-delayed-due-to-storms/>

Nolan, D., 2021: The Lightning Danger at Last Saturday's Postponed Garth Brooks Concert. *WKRN-TV*. August 6, 2021. Link: <https://www.wkrn.com/news/the-lightning-danger-at-last-saturdays-postponed-garth-brooks-concert/>

WTVO, 2021: Lightning Destroys George Floyd Mural in Ohio. *Nexstar Media Wire*. July 14, 2021.
Link: <https://kdvr.com/news/lightning-destroys-george-floyd-mural-in-ohio/>

Bink, A., 2021: Multiple People Struck by Lightning in Grand Canyon National Park. *Nexstar Media Wire*. July 22, 2021. Link: <https://www.wkrn.com/news/multiple-people-struck-by-lightning-in-grand-canyon-national-park/>

Fieldstadt, E. and J. Varela, 2021: Boy, 13, Dies After Lightning Strike at New York City Beach. *NBC News via Aol.com News*. August 13, 2021. Link: <https://www.aol.com/news/boy-13-dies-lightning-strike-145700028.html>

News 12 Staff, 2021: Teen dies as result of lightning strike at Orchard Beach. *Bronxnews12.com*. August 13, 2021. Link: <https://bronx.news12.com/13-year-old-boy-in-critical-condition-after-lightning-strike-at-orchard-beach>

Tornabene, J., 2021: Lightning Strikes Blamed for 2 Wisconsin House Fires Approx. 50 Miles Apart. *NBC15.com*. August 11, 2021. Link: <https://www.nbc15.com/2021/08/11/lightning-strike-sets-green-lake-co-home-fire/>

Fox 19 Digital Staff, 2021: WATCH: Massive Thunder Cloud, Visible for 50 Miles, Moves Across Tri-State. *Fox19.com*. August 12, 2021. Link: <https://www.fox19.com/2021/08/13/watch-massive-thunder-cloud-visible-50-miles-moves-across-tri-state/>

Teen Struck by Lightning CAUGHT ON VIDEO. *ABC News via YouTube*. July 28, 2016. Link: <https://youtu.be/YBti58eIoPI> Strike was in Bradley Beach, NJ on July 25, 2016.

Caught on Camera: Lightning Strikes Plane, Injures Worker. *WKRK-TV via YouTube*. August 2, 2017. Link: https://www.youtube.com/watch?v=_0ae75UIrf4

Andrews, C., Reisner, A. and M. Cooper, 2017: Post Electrical or Lightning Injury Syndrome: A Proposal for an American Psychiatric Association's Diagnostic and Statistical Manual Formulation With Implications for Treatment. *Neural Regeneration Research*. September 12, 2017. Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5649452/>