

LIGHTNING DATA CENTER MINUTES

June 9, 2023

ST. ANTHONY HOSPITAL, LAKEWOOD, COLORADO

Monthly Quote: “So it easily came to pass that the principal god was always the lightning-wielder; Jupiter/Zeus among the Romans and Greeks, Thor among the peoples of the north. Even Yahvh of the Semites is said to have been originally a weather-god; the attributes of majesty and mercy that made him king above all gods and finally the sole god came through the inspiration of the patriarchs and prophets of that genius race in religion, the Jews. And we still see the lightning flashing about him on the summit of Sinai.”

- Dr. Frank Thone, Evening Star, May 28, 1933

Members present: Clark, Yarnell (Phil and Barbara), Langford, Wells, Wachtel (Howard and Clara), Gartling, Swanson and Holle. We also had present several members of the Cherington family: Cherington (Nancy, Kim, David, Claire and Jennifer), Nussbaum (Tannes Michael and Sarah), Coffe, Turner, and Austin.

1. 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. LDC currently has \$742.00 in cash, due to a purchase of lightning data.
2. It seems rather fitting that the Denver-Boulder area had a pretty good display of lightning from thunderstorms that passed through the area from about 7-9 PM on Thursday evening, June 8, because on Friday, June 9, 2023, we celebrated the life of Dr. Michael Cherington with tributes, reminiscing, and by recalling some things that drove his curiosity. Our theme was “The Intellectual Curiosity of Dr. Cherington”. Here are my incomplete notes from the meeting.
3. Steve Clark started by talking about some things that piqued or would have piqued Michael’s curiosity. He mentioned the Colorado lightning strike cases presented in December 2004 by meteorologist Steve Hodanish with the NWS Forecast Office in Pueblo, Colorado. In addition, Mr. Clark addressed megaflashes, of which there are two new records as of February 2022. He touched on corona discharge/ball lightning. Michael, along with Dr. Phil Yarnell, Sheryl Olson and other researchers documented a case of corona discharge, possibly ball lightning, onboard a United Airlines flight where a flight attendant had come into contact with a ball of light after lightning had struck the plane. To the authors’ knowledge, the study was the first to document in the medical literature, a case of corona discharge or ball lightning injuring a person inside an aircraft. Finally, Steve addressed Lichtenberg Figures and recalled a case where a woman had been hit by lightning while under a tree. Paramedics wanted to get an ECG and placed an electrode on her chest. When she arrived at the hospital, a ferning pattern had developed around the electrode. That case absolutely fascinated Dr. Cherington.

4. Dr. Phil Yarnell recalled he and Dr. Cherington were students in college when they met. Over the years, he and Michael developed a strong friendship and also a strong professional relationship. He and Michael were co-authors on multiple papers about lightning. Phil recalled Michael writing a paper on a lightning strike to a bicyclist and trying to submit it to the medical literature. The paper was rejected multiple times before being accepted for publication by *The Physician and Sportsmedicine* in August 1990. Shortly after being printed, Michael was contacted independently by Ron Holle, a research meteorologist, and Ron Larson, an engineer. The three met at a Wendy's and discussed the article. After Michael talked with his wife Nancy, the first meeting of the Colorado Lightning Task Force was held on February 7, 1992, which later became the Lightning Data Center. Phil also recalled Michael's love of chess.
5. Howard Wachtel spoke very fondly of Dr. Cherington. Howard and Phil had known each other for several years and both had an interest in electrophysiology. That mutual interest led Phil to invite Howard to his first LDC meeting and that is how Howard met Michael. Howard would sometimes bring his wife Clara to the meetings and sometimes Nancy would be there with Michael. The two couples developed a close and warm friendship. Nancy and Michael would invite the Wachtels to their place in Florida.
6. Ken Langford closed the formal portion of the meeting by posing a question: "Who is Michael Cherington?". He briefly discussed how the LDC came to be and presented some of LDC's accomplishments that were achieved during Michael's tenure as Chair. LDC discussions helped inform many of Michael's writings and those writings were often cited in the papers of others. Ken also mentioned the piece Michael wrote titled: *Sherlock Holmes: Neurologist?*, which appeared in *Neurology* in 1987. Dr. Yarnell said that article was the most commonly requested article that Michael wrote. Ken closed with photos of the LDC through the years and other photos of Michael.
7. Speaking of photos, there are two photos of Michael at the bottom of these minutes, beneath the Lightning Links section.
8. We heard that Dr. Al Nibbe is 96 years old and would have attended, but he had fallen down and was recovering. Dr. Nibbe wanted to say "Hello" to the group. Get well soon Al.
9. Karen Wells remembered her first meeting of the LDC she attended. As part of her employment, she had to attend multiple lectures and presentations and she thought the LDC meeting would be just another one of those lectures. It wasn't. She found it to be so intellectually stimulating, she looked up all she could on lightning in the medical literature. She found the group to be scholarly and yet diverse.
10. Ron Holle mentioned he was at the second meeting of the Colorado Lightning Task Force and one of Michael's daughters said she was there too. Ron said his being at that meeting was a seminal moment for him. Ron also told us about a book he co-authored with Diale Zhang titled: *Flashes of Brilliance: The Science and Wonder of Arizona Lightning*. The book is available on the internet at multiple sites, including Amazon.com and Barnes & Noble. The price varies from around \$24 - \$32 for the paperback version. The Amazon.com website also features some biographical information for both authors.

11. Finally, the Cheringtons enjoyed seeing each other in person and via Zoom. It was especially touching to see the great-grandson with a big smile on his face calling out to his great-grandmother on the video monitor. The family expressed their appreciation to the LDC for honoring Dr. Cherington.
12. Requests were sent to copyright holders asking permission to post reprints of Michael writings on the LDC website. The American Meteorological Society granted permission some time ago to post the two articles on the underreporting of lightning strikes. The copyright holders in the medical literature declined permission. I suspect the reason is because our website is unsecure, meaning a login and a password would be required to gain entry. For those wanting any of Michael's writings, please send me an e-mail (sclarktoto@gmail.com) and I will mail them to you via standard mail. Please note that supplies are limited to what I received from Nancy Cherington and I will not photocopy them.
13. Some of the writings of which Michael wrote or co-wrote are open-access articles. Here is a sampling of some of them, with links. The links will take you directly to the article or to a webpage from which the article can be downloaded free of charge.

Lichtenberg Figures and Lightning: Case Reports and Review of the Literature.

Cutis. 2007 August;80(2):141-143 Link:

<https://www.mdedge.com/dermatology/article/67551/dermatopathology/lichtenberg-figures-and-lightning-case-reports-and-review>

Lightning and Lichtenberg Figures

International Journal of the Care of the Injured. Volume 34, Issue 5, P367-371, May 2003.

Link: [https://www.injuryjournal.com/article/S0020-1383\(02\)00313-3/pdf](https://www.injuryjournal.com/article/S0020-1383(02)00313-3/pdf)

Lightning Injury and Glioma

International Journal of the Care of the Injured. Volume 25, Issue 10, P687-688, December

1994. Link: [https://www.injuryjournal.com/article/0020-1383\(94\)90018-3/pdf](https://www.injuryjournal.com/article/0020-1383(94)90018-3/pdf)

Childhood Lightning Injuries on the Playing Field

The Journal of Emergency Medicine. Vol. 12, Issue 1, p39-41, January 1994.

Link: <https://www.jem-journal.com/action/doSearchtext1=childhood+lightning&field1=AllField>

Neurologic Complications of Lightning Injuries

Western Journal of Medicine 1995, 162:413-417

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1022790/pdf/westjmed00057-0023.pdf>

14. LDC welcomes your 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.

15. Questions, comments, error notifications, and critiques of these minutes are welcome. Please send them to Steve Clark. Please keep the communications professional and respectful. They will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
16. 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.
17. Next meeting (Zoom only): Friday, July 14, 2023, from 11:45 AM to 1:00 PM MDT.

Respectfully Submitted,
Steven E. Clark, Consulting Meteorologist

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.

Link to Monthly Quote from the Evening Star, May 28, 1933. Link:
<https://chroniclingamerica.loc.gov/lccn/sn83045462/1933-05-28/ed-1/seq-63/#date1=1777&index=9&rows=20&words=Lightning+lightning+LIGHTNING&searchType=basic&sequence=0&state=&date2=1963&proxtext=lightning&y=0&x=0&dateFilterType=yearRange&page=1>

Photos



April 3, 1992. L to R: Ron Larson, Michael Cherington, Rich Collier.



April 3, 1992, L-R: Michael Cherington, Raul Lopez, Jerry Estep, Jodi Chambers, Debbi Clark, Ron Holle, Ken Langford, Steve Clark.