

**Minutes BREa Meeting
May 13, 2025 at 1:00 pm
Via Zoom**

Minutes recorded by Laura Miller

Contact Information:

Brookhaven Retired Employees Association BREa

BNL Bldg. 400A

BREa Recreation/ Attention BREa Meeting

Upton, NY 11973

Present: Laura Buscemi-Robles, Betty Elder, Les Fishbone, Louise Hanson, Joe Indusi, Mark Israel, Jim Lemley, Bill Leonhardt, Sean McCorkle, Yousef Makdisi, Steve Musolino,, Laura Miller, Hue-anh Pham, Mona Rowe, Steve Shapiro, Don Sievers, Barry Siskind, Gwyn Williams

Officers 2024-2026: President: Arnold Moodenbaugh, Vice President: Andy Feldman, Secretary: Laura Miller, Treasurer: Louise Hanson

At the pre-meeting, the BREa Board approved the minutes from BREa's April meeting, 2025 meeting.

1. Call to Order. Arnie Moodenbaugh (Mark Israel for Arnie Moodenbaugh)
 - a. Meeting called to order at 1:00 pm.
2. Minutes of April meeting. Laura
 - a. Minutes were approved at today's board meeting.
 - b. **Action:** Laura will forward the minutes to be posted on BREa's website.
3. Treasurer's Report. Louise Hanson
 - a. Two people had \$105 in dues, which Louise deposited. In early March Arnie had sent out a donation for Tesla Center. They haven't cashed the check yet. The other two donation checks have been cashed. Laura made a motion to approve. Steve Shapiro seconded. Approved with none opposed.
 - b. **Action:** Steve will see if he can expedite with Tesla to get the checks cashed.

4. Membership Report. Betty Elder

Betty sent the report prior to the meeting to the BREA Board. Current membership: 199. Current membership with email: 182. Those with a mailing address: 444. Four new members have joined since the last meeting.

5. Newsletter. Mona Rowe

- a. August will be the anniversary of the Sunrise Highway fire, in Westhampton in 1995. Parts of Rocky Point and Westhampton were evacuated and BNL firefighters as well as Betty Elder and Andy Feldman were involved. Betty was involved in setting up housing for those who needed it, and Andy handled notifications.
- b. LA fire: was JPL affected itself?
- c. There was a fire this past summer in Center Moriches which moved into Westhampton.
- d. Maui fire: Mona will look for the three locations that were accepting donations for the fire.
- e. **Action:** Betty will look for the following names in the membership database: Frank Marotta and Dieter Schneider.

6. CAC Meeting. Mark Israel

- a. Since our last meeting, there were 2 CAC meetings: the April 10th and May 8th meetings. Presentations are available on CAC meeting website. Notes from both meetings can be found at the end of these minutes.
- b. Tim Green's replacement? He was a naturalist, who has retired and will be replaced by Kathy Schaefer. Deer management: in the February 2025 culling, 1015 pounds of deer meat were harvested. Over 30,000 lbs. of deer meat have been distributed since this program was implemented. This is the ninth cull since 2015. Every 10th deer is sampled for radiation.
- c. Planning for controlled burn in the near future.
- d. Sean liked the idea of having speakers at the CAC meetings.
 - i. **Action:** Mark thought it would be good to create a list of speakers we would like to invite to our meetings.
- e. CAC meetings are hybrid and are open to the public.

7. New Business

- a. Cafeteria has contracted with a vendor and Mark Israel said they were good. This company is being used for all cafeteria catering.

- i. **Action:** Speak to Arnie about possibly using the catering company for a lunch meeting to kick off holding meetings in person again.
- b. Steve Shapiro: would like to see us donate to the Long Island Science Museum: <https://www.sciencecenterli.org>
 - i. **Action:** Discuss at next meeting.
- c. Steve Shapiro: How do we advertise our June meeting being held on site?
- d. Joe Indusi: talked about his work and said he could give a presentation.
- e. Don Sievers: he is going to have a new grandson in 5 weeks, his son's first child, a boy and he is elated!
- f. BWIS: has been told they must change their name and cannot be an official part of the lab. They might be able to join BERA as a club, but not an official part of the lab and they can't do fundraising at the lab. The Chemistry Department has a "Joanna Fowler Award" **that has been suspended.** As of this meeting, there has been no support from BNL.
 - i. **Action:** Louise would like to meet with Arnie, Mark and people from BWIS to find out what is happening.

Don made a motion to adjourn, Les seconded, motion passed.

The next meeting will be held June 10th and may take place as a hybrid Zoom/in person meeting.

Minutes from the April and May CAC meetings follow.

CAC May 8, 2025 Meeting Notes

Ken White called the meeting to order at 6:30 pm

Laboratory Director JoAnne Hewitt stated that Laboratory funding remains solid so far. The overall Office of Science proposed budget is approximately 15% lower.

Jason Remien presented a brief update on the mercury contamination cleanup at Building 197's demolition site. He also stated that some pre-corrosion caused an additional release of tritiated water at the RHIC facility. All samples taken were well below drinking water standard.

Natural Resource Update – Kathy Schwager, Natural Resource Manager

Kathy presented updates of the Laboratory's Deer Management, Forest Management and Controlled Burns programs. During 2025, we had the 9th Deer Cull since 2015. With a starting estimate of approximately 350 deer on site, the target was to get that number down to 250. Three weekends were planned, but only one has been implemented, February 1st – 3rd. 43 deer were taken. Every tenth deer was sampled for Cs-137; none of the samples were above the safe level of 0.28 pCi/g. 1015 pounds of meat were donated to Island Harvest in 2025. This brings our cumulative total of donated meat to 30,550 pounds. Sampling of ticks and blood for Suffolk County Vector Control for NYSDOH tick-borne disease studies was also performed.

Kathy also discussed the "No Mow" areas around the Laboratory site, and the importance of forest management and planned controlled burns on selected sections of the site. She provided a review of the impact of the Crescent Bow Fires in 2012, and the 2023 Prescribed Fires at BNL, including mechanical treatment before the burn, and the re-growth four months post-fire.

Cultural Resource Update – Allison McGovern, PhD, Cultural Resource Manager

Alison introduced herself as the new Cultural Resource Manager at BNL, taking over the position of Tim Green, who had retired from the Laboratory. She discussed her background as an archeologist, with extensive experience at various project sites on Long Island. She discussed various archeological sites at BNL, several of which date back to the 19th and early 20th centuries, as well as the Camp Upton WWI and WWII Buildings, Landscapes (such as trenches) and artifacts. Her major undertaking will be documenting these sites and installing kiosks displaying the historic architecture and other information at their various locations throughout the BNL Site. Her goals for the program are:

- Connect the history of the BNL Site with local and regional histories,
- Outreach to local organizations, and
- Storytelling through objects and biographies.

Mark stated that he thought Allison McGovern would be an interesting speaker for one of our future BREA meetings.

“Seize the Day” The CFN (Center for Functional Nanomaterials) was the scientific topic presented by Charles (Chuck) Black, Director of the CFN

Chuck described, in exhilarating fashion, how the CFN aspires to accelerate the most important nanomaterial discoveries of the 21st Century. Materials with nanometer sizes are different from their larger versions, and sometimes better. The CFN fosters team camaraderie through open discussions of its values and mission. Their skills and expertise bring value to their users, serving our nation and the world. The best way to cope in an anxious world is to do something. The CFN has had successful results in the catching and trapping of “Noble Gases” such as argon, xenon, krypton, and radon. Radon is the second leading cause of lung cancer worldwide. This research is important in order to develop new methods to detect and remediate radon. A student-led Radon Remediation Business Plan won the 2024 MSI Connect competition based on a CFN patent. This led to the founding of “RadonLock Innovations” in 2025, which is seeking development funding. Today’s researchers are limited by the amount of knowledge and skill that any one person can have. But CFN is building an AI “nanoscience exocortex,” a team of AI agents that will extend what researchers can accomplish. The AI team can help:

- Find and understand papers
- use software
- Glean science databases
- Operate instruments, and
- Suggest new research ideas

The CFN has developed a nanoscience ChatBot that grounds answers in trusted publications.

The promise of nanoscience is creating materials with new arrangements of atoms, with new and better properties (for example, graphene).

CAC April 10, 2025 Meeting Notes:

The meeting was called to order at 6:31 p.m. Ken White, Facilitator, welcomed everyone and went over the ground rules. He asked everyone present in the room to introduce themselves. Amy Engel then asked the online audience to introduce themselves and said quorum has been established.

David Manning said that Bob Gordon, BHSO manager, has retired. He then welcomed and introduced Andrea Reed, the new Chief of Staff for the Lab Director. John Hill welcomed everyone. He said a Request for Information (RFI) was sent out this week for an Artificial Intelligence (AI) Data Center and Brookhaven is one of the possible sites. After all possible sites are identified, a Request for Proposals (RFP) will be sent out. They would like to move quickly on this. He said this will require its own power plant and will be developed by a public-private partnership, not DOE. But the hope is that it will benefit the Lab also.

Ann Emrick said she recently attended the groundbreaking for the new rail station, and the Science User Support Center (SUSC) building is almost ready for occupancy.

Environmental Updates, Jason Remien – Manager, Environmental and Brian Barth (see presentation)

Topics covered: • Building 197 Demolition and Mercury Remediation • Groundwater Update – Western South Boundary PFAS/1,4-dioxane Investigation • 2026 CERCLA 5-Year Review Kick-off During the Groundwater Update discussion. Member Israel asked if there has been any progress on treatments systems for 1,4 Dioxane. Barth said right now the most viable method is advanced oxygenation process. The 2026 CERCLA 5-Year discussion included the following next steps: • Conduct survey of CAC • Perform site inspections during summer 2025 • Perform interviews with regulators • Draft to regulators in January 2026 • Below is the link to the NYSDEC info locator that was requested at the March CAC meeting: • NYSDEC Info Locator:
<https://gisservices.dec.ny.gov/gis/dil/>

Battery Research at BNL, Amy Marschilok, Manager – Energy Storage Division, Energy Systems Division (see full presentation on website).

Marschilok spoke about the Interdisciplinary Science Department's resilient energy focus. Topics covered: • US Energy Consumption • Energy Storage must meet application need • Center for Mesoscale transport properties • Characterizing battery lifetime and mechanism operando • Programs on new Lithium-Ion technologies • Programs on new water-based battery alternatives • Grid Scale Batteries • HEX as a tool for designing better batteries • \$25M NYS investment – HEX Beamline at NSLS II

Ken White relayed a question from Member Madigan: Is any work being done on iron batteries at Brookhaven? Marschilok replied that work is being done on iron as a material for energy storage. Member Kern asked what the thoughts on replacement materials are for Lithium-Ion batteries and how soon will zinc batteries become a sustainable source. He asked about flammability issues and what is seen as a good replacement. Marschilok said sodium is more environmentally friendly. However, depending on the type of sodium battery used, flammability can still be a concern. There is a lot of work being done on the various alternatives.