



Minutes for the November 13, 2023, FORNL Board Meeting

Opening – Herb Krause

Herb Krause called the Zoom meeting to order at 9:30 a.m. A quorum was present.

Attendees:

Officers present: Herb Krause, President; Ellen Smith, Vice President; David Mullins, Treasurer; and Fred Peretz, Secretary.

Board Members Present: Syd Ball, Al Ekkebus, Carolyn Krause and Steve Overbury.

Adjunct member in attendance: James Rome.

Announcements – Herb Krause

None.

Lab Liaison – Katy Brown

No report this month.

Secretary – Fred Peretz

Minutes for the October 9 board meeting were circulated to the board with the agenda. They were approved and will be posted on the FORNL website.

Treasurer – David Mullins

David Mullins reported income from one annual member and Benevity. Costs incurred for the October ORNL Wellness and Benefits Fair and Community Lecture are detailed in the relevant sections later in these minutes.

David has received a letter from the IRS documenting our charitable nonprofit status and has forwarded it to the State of Tennessee. Documentation of our tax-exempt status should be coming soon. Jim Rome has renewed our MailChimp subscription. Next year, we will likely be paying for a Zoom subscription. Cash flow for the year remains positive.

Membership – David Mullins

One annual membership was received; since the person has already paid for 2023 it will be credited to 2024. Any payments received in November or December will be credited to 2024. There are now 55 life and 48 annual members.

Luncheon Lectures - Ellen Smith, Carolyn Krause, Bob Compton

On October 10, Phil Snyder, a theoretical and computational physicist currently serving as interim director of ORNL's Fusion Energy Division, spoke on "The US Fusion Energy Program and ORNL's Role." There were about 32 people attending in-house, with another 32 on Zoom.



Upcoming meetings:

The November 14 talk will be from James Rome, “How to Keep Your Computer (and You) Safe,” addressing threats and mitigation measures in today’s electronic communications world.

There will not be a lunch meeting or talk in December.

The first meeting and talk in 2024, held on January 9, will be from Mali Balasubramanian, the current leader of ORNL’s Emerging and Solid-State Batteries Group in the Energy Science and Technology Directorate. He guides his team in exploring potential new materials and systems for electric vehicles and other battery applications.

This schedule confirms talks into 2024. The speaker committee continues to work toward a goal of having a list of a half-dozen potential speakers to draw on, avoiding issues with finding a last-minute speaker. Dates to fill in 2024 begin with February 13. Potential speakers under consideration (some of which have not yet been contacted) include:

- Edmon Begoli, the founding director of ORNL’s Center for AI Security Research.
- Robert Bolton, deputy of operations for the Next-Generation Ecosystem Experiments Arctic project.
- Carrie Eckert, on the use of quantum biology, artificial intelligence and bioengineering to improve CRISPR Cas9 genome editing.
- John Galambos or Mark Champion, on the SNS Proton Power Upgrade project and its implications for neutron research at ORNL.
- Steven Hamilton, on the Exascale Small Modular Reactor project at the ORNL Frontier supercomputer.
- Madhavi Martin, on the use of laser-induced breakdown spectroscopy in bioenergy, soil carbon storage and environmental monitoring.
- Tony Mezzacappa, on the use of supercomputers to predict gravitational wave signatures needed to detect distant supernovae.
- Karren More, director of the Center for Nanophase Materials Sciences at ORNL.
- Katherine Page, on the use of neutron diffraction to gain new insights into complex functional materials on both bulk and nano scales.
- Lee Riedinger, on the history of the UT-ORNL partnership as described in his new book.
- Tomonori Saito and Md Arifuzzaman, on an organocatalyst that allows selective deconstruction of various plastics.
- Zili Wu, on the newly established Energy Earthshot Research Center at ORNL.
- A speaker on the recent shipment of Pu-238 for NASA applications, or on the use of additive printing in developing a lunar wheel prototype.

Media reports

Newspapers – Carolyn Krause

A front-page article in the Nov. 9 print edition of The Oak Ridger covered the talk on artificial intelligence by national AI expert Lynne Parker on Oct. 26 at the Zach Wamp Auditorium at the Y-12 New Hope Center. It was our second Dick Smyser Community Lecture of the year, and it was attended by about 125 people. The article was also posted online.

An article on Phil Snyder’s talk on government plans for a fusion pilot plant that might produce electricity in the 2030s has been submitted to The Oak Ridger and should appear over the next 10 days.

A news release on Jim Rome’s talk on computer security tomorrow is now online and should appear in the Tuesday morning Oak Ridger print edition.



Facebook – Ellen Smith

Responses including “thanks for the invite” to our luncheon lecture demonstrate some contact with the public via our Facebook page.

Hybrid Meeting – Herb Krause

Preparations for tomorrow’s hybrid meeting are complete. Herb Krause will set up and host, record, and handle in-house questions following the talk. Steve Overbury will co-host, and handle Zoom chat questions. Herb will give the outreach message and introduce the speaker, and David Mullins will collect dues.

Webmaster – James Rome

No issues with the website were reported.

AMSE and Bus Tours – Al Ekkebus

For the month of October, there were 12 tours with 348 people on board. During October, AMSE was able to work with several organizations that booked group tours. This included one bus that was filled completely by the Rarity Bay Women's group as well as two groups from Tellico Village. The final week of tours begins November 13. Plans are to evaluate the tour during the off season, soliciting input from ORNL and Y-12 on how the tours can be improved next year.

New Member and Public Outreach – Fred Peretz, Syd Ball, Bob Compton, and Herb Krause

Herb and Gloria Caton represented FORNL at the ORNL Benefits and Wellness Fair held on October 19, 2023. Syd’s CPU monitor and Herb’s laptop were used to show the FORNL mission, display screen shots of the fornl.org home and past lecture pages, and to play past lectures on the second floor of the Conference Center. Twenty-four people stopped and asked for more information about FORNL and took our handouts among hundreds that passed us. Most visitors had ORNL badges but four had DOE badges. Gloria thought this year was more successful than last year in communicating our overall mission. The cost was \$76.72 for handout materials.

Gifts and participation information for the 2024 Tennessee Science Bowl and the Southern Appalachian Science and Engineering Fair (and its Virtual Science Club) is discussed under new business.

Community Lectures – Kent Williams, and Bob Compton

On October 26 Dr. Lynne Parker, Associate Vice Chancellor and Director of the Artificial Intelligence Tennessee Initiative at UTK, discussed AI at Y-12’s New Hope Center. Refreshments were served in the lobby starting about 6:30 p.m. Less food was provided by Judy Dodd Catering than at the previous community lecture, and the amount proved sufficient. Lee Riedinger introduced the speaker after the Dick Smyser lecture history and sponsor reminders by Herb Krause. The total attendance was about 125 people. Costs for the lecture were a payment to Y-12 of \$466.87 (plus a refundable \$500 deposit), and \$710.13 to Judy Dodd Catering for food.

Possible speakers for future community lectures include Lee Reidinger, on his book co-authored by Al Ekkebus, or Stephen Streiffer, the new ORNL Laboratory Director. It was observed that conducting these community lectures is a key justification for our annual funding from ORNL.

Manhattan Project – Fred Peretz

PDH Certificates – David Fields

Visitor Badges – Syd Ball



No report.

Old Business

Carolyn Krause reported on the progress of the nominating committee proposing a slate of candidates to be placed before the membership for approval in 2024. Al Ekkebus, Ray Garrett, Herb Krause, Dave Mullins, and Ellen Smith will complete their terms in 2024. Of this group, Ellen, Dave, and Ray agreed to run for an additional term. The nominating committee solicited Kathy Gant and Bruce Moyer as recommended candidates to replace Al and Herb.

Carolyn Krause, as convener of the nominating committee, moved that the board approves the following slate of candidates— Ellen Smith, Dave Mullins, Ray Garrett, Kathy Gant, and Bruce Moyer—for election by the FORNL membership at the February annual meeting. Each candidate agreed to serve. The board voted to approve the list; a formal nominating committee report will be provided in December.

If elected, Dave also agreed to continue as treasurer.

New Business

Syd Ball mentioned that Kairos Power will be holding a “Welcoming Hermes” community event at AMSE on December 5. Attendance is at no cost, but prospective attendees must apply for a ticket in advance. (Subsequent to the meeting, an email inviting FORNL members to the event was circulated.)

Two motions were made to provide funding for the Tennessee Science Bowl and the Southern Appalachian Science and Engineering Fair:

A motion was made to donate \$1,500 to the Tennessee Science Bowl hosted by ORAU and to advertise for FORNL volunteers. After discussion on the relative merits of the two activities, a motion was made to amend the donation to \$1,000 (bringing donations to the two events to the same amount). The amendment passed, and the amended donation motion also passed.

A motion was made to donate \$1,000 (the same amount as donated last year) to the Southern Appalachian Science and Engineering Fair (SASEF) hosted by the University of Tennessee on March 26, 2024, and advertise for FORNL volunteers to be judges. The motion passed. It was noted that we participated in the associated Virtual Science Club in the last cycle, and that we discussed but didn’t offer a “sponsored special award” at last year’s fair.

David Mullins has contact information for both organizations and will mail the checks.

Closing

The next board meeting will be held at 9:30 a.m. on December 11, 2023.

The meeting was adjourned at 10:59 a.m.

Respectfully submitted,
Fred Peretz
Secretary, Friends of ORNL