

The EX-Ls Retiree Association Celebrates 40 years



EX-Ls Retiree Newsletter

Lawrence Berkeley National Laboratory – Fall 2022

Join Us for the EX-Ls FREE Zoom Speaker

Date: Thursday, November 17, 2022

Title: Building and Grid Technologies Research for Carbon Reduction, Occupant Comfort and Health - A Sampling of Projects from Berkeley Lab's FLEXLAB and Beyond

Speaker: Cindy Regnier, Technical Leader for Commercial Building Systems at Berkeley Lab and Executive Manager for FLEXLAB®,

Time: 1:00 to 2:00 pm

Register [here](#)

Cindy Regnier, P.E., P.Eng., LEED AP, is the Technical Leader for Commercial Building Systems at Lawrence Berkeley National Lab, and Executive Manager for DOE's Facility for Low Energy Experiments in Buildings. [FLEXLAB](#) is a series of experimental testbeds housed at Berkeley Lab that are focused on research development and demonstration of integrated systems and grid enabled controls. She also manages several research projects focused on deployment of low energy systems and technologies. These include the development of integrated systems incentive programs for utilities, and 2030 District-scale solutions focused on small commercial enterprises in a number of U.S. cities. Prior to joining LBNL in 2009, she spent 13+ years on the design of innovative, integrated HVAC systems, including AIA COTE Top 10, LEED Platinum buildings, and a 200,000 square foot carbon neutral science museum. Her Bachelor's degree is in Mathematics and Mechanical Engineering from Queen's University, Canada, and she holds professional engineering licenses in California and Ontario, Canada.



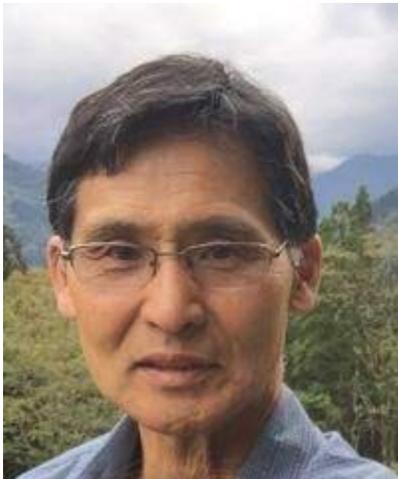
EX-Ls Membership

We welcome new members to the LBNL Retirement Association or EX-Ls. If you would like to change your email address, please send an email with the words "Address Change" in the Subject line to EX-Ls@berkeley.edu. Include your name and the old and new email addresses in the body of the email. EX-Ls Mailing Address at UCB Retirement Center is: LBNL EX-Ls; 101 University Hall, Berkeley CA 94720-1550. Website: <https://retirement.berkeley.edu/ex-ls>

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President's Report – Howard Hatayama



By the time you read this, you will probably have heard that we postponed the August 18, 2022 in-person event at the Berkeley Yacht Club to celebrate our 40th anniversary until next year. Planning for the event under Rich Sextro's leadership started in January. Although we were hoping that the COVID pandemic would have subsided enough to make it safe to have this event, the evolution of the virus and its virulence caused us to take a very measured approach. We've all been missing the personal interactions and connections that can only happen in-person.

As we conclude our 2022 programming, I look forward to seeing you all at our next event on November 17, 2022. Cindy Regnier, Technical Leader for Commercial Building Systems at Lawrence Berkeley National Lab and Executive Manager for FLEXLAB®, the U.S. Department of Energy's newest building technologies testing facility, will be updating us on the Facility for Low Energy Experiments in Buildings.

This is the time of year when we normally consider and vote on a slate of officers to serve on the Board of the EX-Ls. This includes the President, the First and Second Vice Presidents, Secretary, Treasurer, Membership Coordinator, and Activities Coordinator. Our slate for 2023 is as follows:

President: Howard Hatayama

First Vice President: Vacant

Second Vice President: Vacant

Secretary: Ken Barat

Treasurer: Vacant

Membership Coordinator: Jane Tanamachi

Activities Coordinator: Vacant

For various reasons, some related to the COVID pandemic, recruitment for the vacant positions has been very difficult over the last two years. Per our bylaws, the President, First Vice President, and Second Vice President serve for one full Term in these offices. For the following Term, the First Vice President normally becomes the nominated candidate for President, and the Second Vice President normally becomes the nominated candidate for First Vice President. Since we have no one in the line of succession, I will be serving for one more year as President and invite anyone who may be interested in any of the vacant positions to contact our Membership Coordinator, Jane Tanamachi (jktanamachi@gmail.com), Ben Feinberg (bfeinberg22@gmail.com) or myself (hkhatayama@gmail.com). We will be voting on the 2023 slate at our November 17, 2022 Zoom meeting but we do have the ability to make interim appointments thereafter.

While we are indeed running lean right now, we are still planning activities for next year with the help of current and former Board members. The tentative dates for our Zoom seminars are: February 16, May 18, August 17 and November 16, 2023. Activities will continue to be on Zoom until we find an Activities Coordinator who can help us plan and execute in-person events.

A BIG THANK YOU to our 2022 Board members: Kim Williams, Ken Barat, Howard Matis, Jane Tanamachi, Lynn Yarris and Nancy Brown; and to former Board Presidents Ben Feinberg, Bob Cahn and Rich Sextro; and to UCB Retirement Center Director Cary Sweeney and Associate Director Camille Koue.

I hope to see you on November 17 and have a wonderful holiday season.

Celebrating the 40th Anniversary of EX-Ls – Rich Sextro

2022 marks the 40th year since the founding of EX-Ls. This is the last of three brief articles on the history of EX-Ls, the first two appeared in the winter and spring editions of this newsletter. For those of you with sharp memories (or access to either of the two previous articles) you will recall that we had planned an in-person 40th anniversary celebration this past August at the Berkeley Yacht Club. Alas, concern about a mid-summer resurgence in the Corona Virus led the EX-Ls board to postpone this event as a Zoom-based event didn't seem all that celebratory. So continue to stay tuned!

In the new millennium, EX-Ls continued to host quarterly luncheons with speakers on a wide range of topics - including new science initiatives at the lab, the love life of Robert Oppenheimer, bee keeping, and local engineering projects such as the fourth bore of the Caldicott tunnel and the rebuild of the eastern span of the Bay Bridge. The tradition of hosting the lab director for a state-of-the-laboratory talk also continued: Steve Chu in 2007, Paul Alivisatos in 2010, and the then newly minted lab director, Mike Witherell in 2016 (previous talks were given by Dave Shirley in 1984 and Chuck Shank in 1996 and 1998).

EX-Ls continued another lunch tradition as well, choosing a favorite restaurant as a lunch venue only to have it close a few years later (e.g. Spengers). His Lordships at the Berkeley marina became a 'go-to' venue for several UC retiree organizations, only to close in 2018. No cause and effect relationship has been found.



As with other organizations, the rise of the Corona Virus (SARS/COV2) in late 2019/early 2020 has had a lasting impact on EX-Ls luncheons. Beginning with the spring 2020 lecture (ironically on the spread and impact of Covid), Zoom became the medium of interest and since that time, all of the quarterly lunch talks have been via Zoom. Lunch has been whatever was available in your refrigerator. Remote lectures have had the salutary effect of increased attendance for many of the talks - including participation by retirees who would not otherwise be able to

attend. The downside has been not being able to visit with fellow retirees in person - a primary benefit of having in-person lunches. Hopefully in 2023 these lunches will return.

Organizationally, in 2016 the EX-Ls Board adopted a universal membership approach - meaning that all LBNL retirees (and their spouses/significant others) are considered to be members of EX-Ls. There are now no yearly membership dues and operating expenses are covered by voluntary donations.

In 2002, EX-Ls began to participate in retiree events and opportunities sponsored by the UC Berkeley Retirement Center. The Retirement Center was formed in 1997 by then Chancellor Tien to provide support to campus staff and faculty retirees. Following the initial trial period, LBNL established an on-going contractual relationship with the Retirement Center to provide retirement services and opportunities, for which EX-Ls has provided support and advice.



In addition to retirees from LBNL and campus, the Center now includes retirees from the UC Office of the President (whose offices are in Oakland). As a result, there are now more than 16,000 retiree constituents of the Center, including 2,400 from LBNL (LBNL is second to the UCB staff in the number of retirees). EX-Ls and lab retirees in general have benefitted from this close and supportive working relationship with the Center, including pre-retirement programs for active LBNL staff, Learning in Retirement lectures, and the UC Retiree Learning Series, conducted in association with local retirement communities like Belmont Village. The close working relationship among the retiree organizations - EX-Ls, UCRA (UCB staff), UCBEA (emeriti), and PARRA (UCOP staff) - has enabled broader participation in activities sponsored by these organizations. It has also afforded a more robust means for retirees to review and comment upon UC policies affecting retirees, such as health care coverage.

Past Presidents of the EX-Ls from 2002 to 2022

Bob Birge 2002

Bob Fulton 2003

Sig Rogers 2004

Gene Binnall 2005

John Kadyk 2006

Janis Dairiki 2007

Jose Alonso 2008

Don Grether 2009

Richard Sextro 2010

Rollie Otto 2011

Joseph Jaklevic 2012, 2013

Trudy Forte 2014

Connie Grondona 2015

Cheryl Fragiadakis 2016

Lee Schroeder 2017

Henry Rutkowski 2018

Nancy Brown 2019

Bob Cahn 2020

Ben Feinberg 2021

Howard Hatayama 2022 (the first president in the EX-Ls fifth decade!)

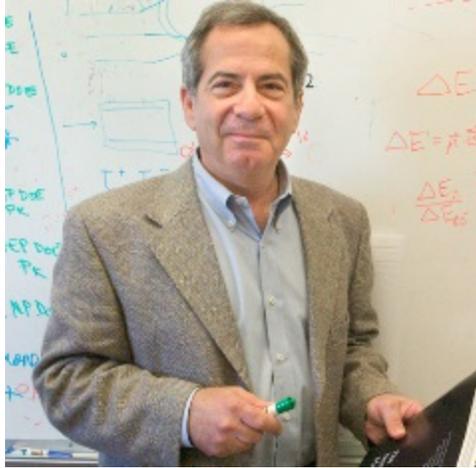
Nobel Ties: Lab Connected to 2022 Nobels in Chemistry, Physics and Physiology or Medicine



The awarding of this year's [Nobel Prizes](#) in Chemistry, Physics, and Physiology or Medicine provided Berkeley Lab with a rare trifecta in that recipients for each prize at one time carried out research here. The most direct connection is that of [Carolyn Bertozzi](#), who shared the Nobel Prize in Chemistry with Morten Meldal, and K. Barry Sharpless “for the development of click chemistry and bioorthogonal chemistry.”

Bertozzi, now a chemistry professor at Stanford University, was a faculty scientist at Berkeley Lab and UC Berkeley from 1996 to 2015. From 2006 to 2010 she also served as the director of Berkeley Lab's Molecular Foundry, a DOE nanoscience user facility she helped found. While at Berkeley, Bertozzi developed a groundbreaking technology she dubbed “bioorthogonal chemistry.” This technology enables scientists to explore and track biological processes that take place inside living cells without disrupting the normal chemistry of the cells. Bertozzi developed bioorthogonal chemistry to solve the scientific equivalent of finding a needle in a haystack – singling out one type of biomolecule for analysis from all the diverse species that populate cells and organisms.





The 2022 Nobel Prize in Physics was shared by John Clauser, Alain Aspect and Anton Zeilinger “for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science.” In 1971, Clauser was a postdoctoral researcher with the Lab’s Physics Division when he and graduate student Stuart Freedman carried out an experiment in the sub-basement of Birge Hall to test a phenomenon of quantum mechanics that

Einstein called “spooky action at a distance.” The experiment became the first to demonstrate that two particles - once they are linked or entangled through quantum mechanics - can be separated by large distances, even the diameter of the universe, and still “know” what happens to one another. The research was Freedman’s Ph.D. dissertation in 1972. Freedman went on to become a world-renowned physicist in Berkeley Lab’s Nuclear Science Division before dying tragically in 2012. Clauser continued to refine the original experiment to provide more convincing proof that in violation of Bell inequalities (named for Northern Irish physicist John Stewart Bell), the quantum mechanical description of entangled particles is correct.

The 2022 Nobel Prize in Physiology or Medicine was awarded to Svante Pääbo, director of the Max Planck Institute for Evolutionary Anthropology, “for his discoveries concerning the genomes of extinct hominins and human evolution.”

Starting around 1997, Pääbo and other scientists began applying genetic technologies to the study of Neanderthals. Pääbo established that Neanderthals were cousins rather than ancestors of modern humans, and that the two broke off into separate species about 500,000 years ago. However, these studies were based on analysis of mitochondrial DNA (mtDNA), genetic material that lies outside the nucleus of the cell. Though mtDNA tends to remain preserved longer than nuclear DNA, it provides limited biological information as the vast majority of the genome is comprised of nuclear DNA. This shortcoming brought Pääbo to Berkeley Lab’s Joint Genome Institute



(JGI), where he collaborated with a team led by Edward Rubin, then director of both JGI and Berkeley Lab's Genomics Division. Sequencing nuclear DNA from fossilized Neanderthal bones, the collaboration showed that the genomes of modern humans and Neanderthals are at least 99.5-percent identical. Pääbo would continue with the work and in the process discover a previously unknown hominin, Denisova.

New Lab Website: First Major Redesign Since 2006

As many of you have discovered, the Lab's [Website](#) has undergone a complete overhaul, a project that was two years in the making and was co-managed by Laurel Kellner with Strategic Communications, and Pat Tura with Information Technologies. In a recent interview in [Elements](#), the Lab's on-line news site for the Berkeley Lab community, Kellner explained the thinking behind the creation of the new site.

“The Lab has grown and changed since the last version of our website was put in place, and so have the standards and expectations for digital communications,” she said. “It was time to create a new web presence that better represents who we are today. The new site elevates what we care about most. It tells our story in a unified way. It calls out our cross-Lab connectivity. It shows the big impacts of our science and our leadership as an organization that evolved from our team science mentality. Our big goals were to build something that reflects the Lab's excellence and enhances recruitment, partnerships, funding, and Lab culture.”



To develop their redesign strategy, Kellner, Tura and their team communicated with more than 300 people inside and outside of the Lab. They held focus groups and workshops, and conducted a survey to identify key audiences and needs.

“Our website is now a more inclusive place for people with disabilities who use assistive technology, for people who are more often on their phone than in front of a computer, and for people who don’t know anything about us but want to learn more,” Kellner said. “We’re not done yet. Over the next year, we’ll be working with folks across the Lab on adopting the new site for many of our research areas and user facilities.”

Preparing Science’s Next Generation: Spring Zoom Talk by Faith Dukes, Director of Lab’s K-12 STEM Programs

Recent surveys show that many K-12 students suffered severe educational setbacks because of the COVID pandemic. Especially hard hit were the STEM subjects. In light of this discouraging news, the ZOOM talk presented to EX-Ls by Faith Dukes this past May gave cause for future optimism. Dukes, who currently directs the Lab’s K-12 STEM Education Programs within the Government and Community Relations Office, explained that the Lab’s K-12 STEM programs are an extension of IDEA , an ambitious suite of initiatives for Inclusion, Diversity, Equity and Accountability.



“Our programs exist to excite young people about the expansive world of STEM,” Dukes said. “We aim to strengthen their STEM identity, and increase the number of students from underrepresented groups who pursue a STEM major or career.”

Through the Lab’s K-12 STEM programs, students interact with diverse mentors and role models across a wide swath of science and science-related fields and careers. They tour one-of-a-kind instrumentation and spaces, and can witness research at the frontiers of knowledge. Career awareness, exploration, preparation and training are all part of a work-based learning continuum that the K-12 STEM programs provide. Two years ago, the Lab began a program called SAGE, for Science Accelerating Girls’ Engagement, to connect young women with STEM

professionals, and in 2022, the Lab unveiled a bilingual program called SEA, for *Science in Accion*.

“Looking to the future based on lessons learned, we know that partnerships across national labs, and with school districts, Berkeley Lab employees, and the Berkeley Lab Foundation are key to building capacity and sustaining STEM programming,” Dukes said. “COVID has had an outsized impact on students, especially those living in under-resourced communities, but long-term engagements can provide a return on investments that will help ensure a well-prepared future work force.”

Dukes closed her talk by encouraging EX-Ls interested in helping to sign up for volunteer activities by visiting the Berkeley Lab Foundation Website at <http://www.berkeleylabfoundation.org/>



UC Berkeley Emeriti Academy Presents: Navigating the Challenges of Aging

**Monday, November 14, 3pm to 4:30pm
(via Zoom)**

Register [here](#)

**Interactive Public Discussion Panel with
Experts from Geriatric Medicine, Social Work, Physical Therapy, and
Pharmacy**

In contrast with many presentations on the negative changes to be expected in aging, the panelists will focus on take-home messages about what we can do to meet the challenges associated with aging. This interdisciplinary panel features the following experts: Keynote speaker Geriatrician John Newman, MD, PhD, University of California, San Francisco (UCSF); Clinical Services Director and Family Consultant Christina Irving, LCSW, Family Caregiver Alliance; Physical Therapist Wendy Katzman, PT, DPTSc, Professor Emerita, Department of

Physical Therapy and Rehabilitation Science, UCSF; and Pharmacist Marilyn Stebbins, PharmD, Professor Emerita, School of Pharmacy, UCSF, and Pharmacy Director of Riva Health, a Cardiovascular healthcare startup. The event is being moderated by Cary Sweeney, MS, Director, Retirement Center, UCB. A brief Q&A will follow each presentation and a longer Q&A will follow the presentations by the four speakers.

2022 EX-Ls OFFICERS, INFORMATION & CALENDARS

EX-Ls BOARD OF DIRECTORS

President: Howard Hatayama
1st Vice-President: vacant
2nd Vice-President: vacant
Secretary: Ken Barat
Treasurer: vacant
Membership: Jane Tanamachi
Activities Coordinator: vacant
LBNL Liaison: Margaret Dick
CUCRA Representative: Nancy Brown
UCBRC Advisory Board: Ben Feinberg/Howard Hatayama
Editor EX-Ls Newsletter: Lynn Yarris
UCBRC Director and Liaison: Cary Sweeney

EX-Ls Address at UCB Retirement Center

Mailing Address: LBNL EX-Ls; 101 University Hall, Berkeley CA 94720-1550

Website: <https://retirement.berkeley.edu/ex-ls>

Webmaster: Camille Koue, UCBRC

2023 EX-Ls Board Meeting Calendar

January 5, 2023
April 6, 2023
July 13, 2023
October 12, 2023

2023 Virtual Luncheon Meetings & Events

Feb 16, 2023
May 18, 2023
August 17, 2023
November 16, 2023
Director's Retiree Reception. Date TBD

Newsletter Suggestions

If you have an item to suggest for the EX-Ls Newsletter or an article you would like to see please contact Lynn Yarris:
lcyyarris@gmail.com