



**Fall 2013**

**Volume 4**

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## **EX-Ls EXPRESS – Fall 2013**

Published Quarterly at the end of January, April, July, and October

Editor: Louise Vogelsberg

**Deadline for Newsletter submittals is 7 days after the Board meeting.**

### **EX-Ls BOARD OF DIRECTORS**

|  |                               |
|--|-------------------------------|
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| UCBRC Liaison:   | Patrick Cullinane             |
| Editor EX-Ls EXPRESS:  | Louise Vogelsberg             |
| Webmaster – <a href="http://www.lbl.gov/EX-Ls">www.lbl.gov/EX-Ls</a> | Richard Baker                 |

### **PAST PRESIDENTS**

|                      |                             |
|----------------------|-----------------------------|
| Rollie Otto – 2011   | Ken Mirk – 1999             |
| Richard Sexto – 2010 | Paul Hernandez – 1998       |
| Don Grether – 2009   | Clay Sealy – 1996-1998      |
| Jose Alonso – 2008   | Igor Blake – 1994-1996      |
| Janis Dairiki – 2007 | Conway Peterson – 1992-1994 |
| John Kadyk – 2006    | Howard Browne – 1990-1992   |
| Gene Binnall – 2005  | Ethel Skyrdlinski - 1989    |
| Sig Rogers – 2004    | Al Amon - 1988              |
| Bob Fulton – 2003    | Ken Lou – 1987              |
| Bob Birge – 2002     | Virginia Cherniak - 1986    |
| Per Dahl - 2001      | Bill Bigelow - 1985         |
| Tom Beales – 2000    | Ted Bowers – 1981-1984      |

### **WELCOME NEW MEMBERS THIS QUARTER**

|                    |                    |
|--------------------|--------------------|
| Carolyn Adams      | Stan Klezman       |
| Edward Bubak       | William Hassenzahl |
| Angela Gill        | Barbara Atkinson   |
| Cheryl Fragiadakis | Ken Downing        |
| Elsie Martin       | Jeffrey Fernandez  |
| James McMahan      | Hans Gerog Ritter  |
| Edward Manougian   |                    |

### **2013 CALENDAR OF BOARD MEETINGS & LUNCHEONS**

| <b><u>Board:</u></b> | <b><u>Luncheons:</u></b> |
|----------------------|--------------------------|
| April 11             | May 16                   |
| July 11              | August 15                |
| October 10           | November 21              |

Board Meetings start at **3:00 p.m.** on the dates listed above, usually in 54-130B (that's in the conference room addition to Perseverance Hall at the Cafeteria) at the Lab, but subject to change at the last minute, so check with a Board member if you plan on attending. We welcome attendance by interested members.

### **OFFICE ADDRESS:**

**Our mailing address is:**

LBNL EX-Ls  
1925 Walnut Street #1550  
Berkeley, CA 94720

**Photo Site:** <http://picasaweb.google.com/exLpics>

**Photo Czar:** Ned Dairiki

**Website:** [www.lbl.gov/EX-Ls](http://www.lbl.gov/EX-Ls)

**Webmaster:** Richard Baker ([xrobaker@comcast.net](mailto:xrobaker@comcast.net))

### **EX-Ls Honorary Life Members**

|                |            |
|----------------|------------|
| Shirley Ashley | Inge Henle |
| Esther Colwell | Bud Larsh  |

### **MEMBERS DECEASED IN 2013**

|                |               |
|----------------|---------------|
| Dick A. Mack   | Dave Clark    |
| Gertrude Young | Dave Stevens  |
| Gerald Wilson  | Fred Goulding |

It has been with considerable interest that many of us have followed the periodic bulletins from the Lab Directorate over the last few weeks describing the unprecedented events that were impacting Lab planning and operations and the extraordinary actions that were required to mitigate their effects. In addition to living within the constraints of the congressionally imposed sequestration for most of the year, the Lab also faced potential limitations arising from the government shutdown and impending debt ceiling crisis. Due to the short duration of the crisis, it appears that the Lab was able to minimize the adverse impacts on Lab staff. Among EX-Ls it was interesting to note that one of the groups directly impacted, albeit briefly, was the rehired retirees.

These bulletins followed an earlier message in which the Director described his disappointment in the DOE decision to upgrade the synchrotron facility at SLAC as an alternative to constructing a similar facility as proposed at LBNL. This was to have been the Next Generation Light Source ( NGLS ) described by Peter Denes at a recent EX-Ls luncheon. It does appear, however, that LBNL staff will be deeply involved in the design and construction of the new facility as it goes forward.

As I followed this series of troubling reports concerning the Lab future, I reflected on what might have been similar circumstances that many of us experienced during our own tenures at the Lab. I seem to recall that there were numerous times when there were rumors of impending reductions in funding for certain programs or closure of major facilities that cast a shadow of uncertainty over the future well-being of the Lab. Looking back, it seems the crises were always averted by a timely, creative effort that generated a new initiative or major facility that enabled the Lab to continue to prosper into the future. I hope that similar circumstances will prevail in the present environment.

With respect to current Lab creativity, I was pleased to learn that our friend and former luncheon speaker, Karl Haber, has been named a MacArthur Fellow for his work on audio preservation technology. This is a noteworthy example of the application of sophisticated Lab technology to a problem outside our normal focus in an area of interest to a wider non-scientific community. Haber is the fourth Berkeley Lab scientist to receive this distinctive award. Speaking as an LBNL retiree, it is always gratifying to see the Lab featured in the news in such a positive light.

This is my last President's message as I complete my two-year tenure in office. In retrospect, I am happy to comment that the challenges that we faced over this period were modest. Our By-laws were reviewed and updated on schedule. We assisted in the renewal of the very important contract between the Lab and UCBRC that provides EX-Ls members continuing access to retiree services. The retiree survey was a major, successful undertaking that has

stimulated increased interest in the EX-Ls on the part of Lab management. We continue to work to establish and maintain more formal connections between the EX-Ls and the Lab.

There are ongoing concerns over the gradual decrease in our membership levels together with continued difficulties in recruiting new volunteers to assist in the organization's activities. We have initiated a more vigorous approach to informing new retirees on the benefits of EX-Ls membership. This includes a direct letter from the President to recent retirees and the inclusion of an EX-Ls brochure in the information packet for exiting retirees. I encourage our members to assist in these efforts by contacting recent retirees with whom you are acquainted and encouraging them to join the group.

It is appropriate at this time to recognize those individuals who make the EX-Ls work and point out the importance of their individual contributions. I am pleased to acknowledge the work during the past year of Patti Powers-Risius as our Membership Coordinator and Kay Bristol as Treasurer. They are both new to their respective roles and have stepped in to take charge with negligible disruption in operations coupled with some enhancements in procedures. Karen Springsteen continues in her role as the EX-Ls secretary providing timely and accurate documentation of our meetings while requiring that our procedural rules are followed. Our most visible volunteer is always Vicky Jared who, together with her volunteer assistants, organizes the luncheons and other outings. Vicky also helps in other organizational details too numerous to mention. Dick Baker and Louise Vogelsberg are the webmaster and newsletter editor, respectively. They provide invaluable resources with which to communicate with our membership.

I would also like to recognize the special contributions of Janis Dairiki, Patrick Cullinane and Rich Sextro. Janis is the person who serves as our contact with other UC associated retiree associations by attending meetings, learning about their programs, and keeping them informed of EX-Ls activities. Patrick, as the Director of the UC Retirement Center, attends the EX-Ls Board meetings, informs us of important retiree issues, and contributes actively to our discussions. Rich Sextro is a recent former President of the EX-Ls and the current chair of the UCBRC advisory board. In addition to recognizing his continuing participation in EX-Ls activities, I wish to personally acknowledge his role as advisor and confidant in sorting through various issues over the past two years. Finally, I want to extend my thanks to Trudy Forte and Connie Grondona for their assistance on numerous occasions. I wish them well as they assume their respective leadership roles in the coming year.

In conclusion, it has been a privilege and a pleasure to serve as EX-Ls President. I look forward to continued active participation in the future.

## **REMEMBERING DAVE F. STEVENS: NOV. 19, 1931 – SEPT. 26, 2013**

Dave Stevens, whose Lab career spanned 40 years during which he worked for every Lab director except E. O. Lawrence, and served on the EX-Ls Board of Directors as Newsletter Editor, has died. He began his career in 1960 as a mathematical programmer in Bldg. 46 and was serving as the Lab's liaison to DOE, reviewing directives and formulating responses, when he retired in December 1997. Dave continued working at the Lab as a guest scientist until 2000 so he could oversee the transition of the department during Y2K.

Dave was born in Safford, Arizona but grew up mostly in Butte, Montana (after which he tried his best to not have to live in snow again) and then in Los Angeles. He spent five years in the Navy, reaching the rank of Lieutenant, and then went to the California Institute of Technology, receiving his B.S. in Applied Mathematics. Dave started working on his Masters at UC Berkeley, where he met Sally Edwards, whom he married June 4, 1960. A son, Alan, followed in 1961 and a daughter, Molly, in 1964.

After obtaining his Masters Degree, while working towards his PhD, Dave joined the Berkeley Lab as a computer programmer in the nascent days of the industry. He once remarked that his son's 1997 PC had more computing power than the entire computer floor at the Lab in the late '60s. He worked with many of the Lab's supercomputers in the 1960s and '70s, and headed the computer security program. He also served on several national standards committees. Dave also did a stretch in Alexandria, VA (where his attempt to avoid the snow was thwarted, and the rumor of him being a spy was cemented). He did manage to take a few sabbaticals over the course of his career, including two stints at CERN, in Geneva, Switzerland as a computing consultant.

Dave Stevens accomplished much at LBNL, guiding our institutional computing through unpredictable changes in technology to serve the Lab's mission. His effect on the Lab was visible and critical during his time at LBNL. In the story on his retirement, Dave summed up his career by saying, "I'm not the sort of person who had planned his life. I took a job here because I got married and had \$25 in the bank. Along the way, the Lab has been an interesting ride and provided me with a variety of interesting work. I don't think of myself as a pioneer in scientific computing, but I did get to work with some of the pioneers."

Dave's other interest was his love of music, the arts and acting. Not only was he a long time supporter of local artistic companies, including opera, theater and symphony, he also sang in the choir at all Souls Episcopal Church and belonged to the UC Faculty Monk's Chorus. His love of theater led to annual Town and Gown performances which Dave felt his most memorable portrayal was that of Elwood P. Dowd in the play Harvey.

Dave's dedication to publishing the EX-Ls Ex-Press newsletter for more than 10 years and serving on the By-Laws Committee was appreciated by all who knew him and read the newsletter. His strength in writing, high principles in all his endeavors, keen sense of humor, a good eye for detail was Dave's trade mark that could be seen in his serving on the EX-Ls Board of Directors, the articles he wrote and publishing of the Ex-Press.

We will miss you Dave Stevens.



### **VOLUNTEERS NEEDED NOW!!!**

The Ex-L's can not exist without the help of the volunteer board members.

Currently the 2nd Vice President position remains open.

Please contact Connie Grondona (cegrondona@att.net or 510-333-5423) or any board member to volunteer or to nominate potential candidates.

**LUNCHEON SPEAKER**  
**NOVEMBER 21, 2013**

**Speaker:** Ellie Blakely,  
**Senior Scientist, Life Sciences Division**

**Topic:** Radiation and Cataracts

**Abstract:** This presentation will review what is known about how ionizing radiations, especially accelerated charged particles, can cause the opacification of the crystalline lens we call “cataracts”. Currently astronauts in space travel are at-risk of developing cataracts due to their occupational exposure to charged particles from galactic cosmic radiation or solar particle events. Cancer patients whose eye tumors are successfully treated with charged particle beams in radiotherapy clinics also can develop cataracts if their lenses are in the radiation field. Biological processes underlying the development of radiation cataract will be discussed with a goal to developing biological countermeasures to prevent this radiation effect.

**Biosketch:** Ellie Blakely received her PhD degree in physiology from the University of Illinois, Urbana, in 1975. Shortly thereafter, she joined LBNL as a Staff Biophysicist in the Life Sciences Division and in 1989 was promoted to Senior Scientist. She is an internationally recognized expert in ionizing radiation effects and frequently her expertise is tapped by committees both at the DOE and National Institutes of Health. She has served as Scientific Director of NASA Space Research Summer School. She has been elected to the membership of the National Council on Radiation Protection and Measurements (2000-2018). She is also an elected officer of the Radiation Research Society. Ellie also serves as non-tenured faculty at Colorado State U. (Department of Radiological Health Sciences) and Loma Linda U. (Radiation Medicine). She has been the recipient of numerous awards such as LBL Outstanding Performance Award, DOE Office of Science Outstanding Mentor Award, Research and Development 100 award and the prestigious Lauriston S. Taylor Lecture Award from the National Council on Radiation Protection and Measurements. She is an author on innumerable papers dealing with radiation effects.

**FIELD TRIPS UPDATE – VICKY JARED**

**De Rosa Art Galleries** — The trip planned for the De Rosa Art Galleries was cancelled due to lack of participants. If you are interested in a lovely drive to the Carneros Region of the Napa Valley on your own, De Rosa Galleries may be a place to visit. You will see a unique collection of modern and contemporary paintings, drawings, sculpture, and photographs by well known Bay Area artists. The landscaped grounds and open space offer the visitor refuge to view a broad range of the art of Northern California in a singularly unique setting. The Napa County landmark, (located in a 125-year-old winery-turned residence) houses hundreds of works of art. The De Rosa location and tour information can be found at <http://www.dirosaart.org>.

**LLNL Tour** — The proposed tour of the LLNL Discovery Center and other facilities was postponed due to cutbacks. All scheduled tours were subject to cancellation in the event that the LLNL shuts down. We may try again in 2014.

**Suggested Tours** — Bill and Camille Channel attended the Red Oak Victory Ship and Rosie the Riveter tours and enjoyed the day so much that they wanted to share a few ideas for tours in the Bay Area. Here are a few suggestions for those who want to venture out on your own:

- Muir House and Martinez Adobe - Martinez
- Benicia Arsenal and Camel Barns - Benicia
- Naval Museum - Vallejo
- General Vallejo Home - Sonoma
- General Vallejo Adobe and Rancho - Petaluma
- Port Chicago Memorial - Port Chicago Naval Weapons Station
- Black Diamond Mines - Pittsburg
- Mare Island - Vallejo
- Luther Burbank Home and Gardens - Santa Rosa
- Air Museum - Santa Rosa
- Many Winery tours around Napa, Healdsburg, Santa Rosa and Livermore
- Saki Distillery - between Napa and Vallejo

## **RETIREMENT CENTER UPDATE**

As you read this column, the holiday season is quickly approaching. The Center hopes your preparation for the season is as easy and as enjoyable as possible. It can be a stressful time of year but also a time of many joys and sweet remembrances.

### **Fall Open Enrollment**

We all need to ensure our health benefits. Fall Open Enrollment started on Oct. 28 and will conclude on Nov. 26. On Nov. 13, there will be a Medical Plan Information Day at Freight and Salvage, 2020 Addison St, from 9:00AM to 3:00PM. Representatives from the medical plans will be available for questions. No reservations are needed. In addition, HR is developing an online tutorial about plan offerings. As soon as the Center has the link to this program, we will forward the information to all retirees we have email addresses for. At any time, retirees can call the UCOP Retirement Administration Service Center (RASC) at 800-888-8267. They have a dedicated team trained to handle the benefit needs of retirees.

### **New UCB Chancellor Dirks Inauguration**

On November 8 at 3:00pm in Zellerbach, Chancellor Nicholas Dirks will be inaugurated. Retirees are welcome to attend this event. Go to <http://inauguration.berkeley.edu/> to learn more about activities that day and how you can participate.

### **Passion and Purpose: Transforming Retirement 2**

Some of you remember the excellent full day retiree conference held in May 2012. Robert Reich was the keynoter. The next retiree conference is set for May 15 at His Lordships in the Berkeley Marina. Jennifer Granholm, UC Berkeley Distinguished Practitioner of Law and Public Policy and Michigan's 47th governor from 2003 to 2011, will be the keynoter. The month of May is chosen for this major event as it is Older Americans Month in the US. The month is a time to recognize the contributions and achievements of older Americans. The daylong conference will feature a variety of workshop sessions on topics of interest to retirees.

### **Financial Planning with Fidelity: One-on-One Appointment and Drop-In Hours**

*One-on-One Appointments with Fidelity Guidance Consultants*

Thursday November 14 9am-5pm: Meet one-on-one with a Fidelity Planning and Guidance Consultant to make the most of your UC Retirement Savings Program. We have arranged to have consultants available by appointment at the Retirement Center. They'll be glad to

work with you to establish a plan that includes an annual review of your portfolio and professional guidance on investments and goal planning. To schedule a one-on-one confidential consultation at the Retirement Center, call us at 510-642-5461. You may also call Fidelity directly at 1-800-558-9182 or go online to [ucfocusonyourfuture.com](http://ucfocusonyourfuture.com) to schedule an appointment for a date that is more convenient for you.

### *Fidelity Investments: Drop-In Hours*

Monday November 18 12:30-2pm: Stop by the Retirement Center, 1925 Walnut Street, and ask a Fidelity Retirement Services counselor general questions about the UC Retirement Savings Program. No registration or appointment is necessary. *Note: drop-in sessions are not private or confidential.*

### **Travel Interest Group**

**Tuesday, November 19, 2 – 4 pm:** Join us for an Around the World presentation from Grand Circle Travel (GCT) and learn about travel opportunities available to UC retirees. Their exciting offerings include land tours, river cruises, and adventure travel to destinations including Cuba, Europe, Asia, the South Pacific, Africa, Antarctica and more. After an overview of the GCT's offerings, you'll have a chance to ask questions and enter a raffle to win a travel voucher. RSVP is required to attend this event; call the Center at 510-642-5461 or email [ucbrc@berkeley.edu](mailto:ucbrc@berkeley.edu) to register. All trips booked through GCT support the Council of UC Retiree Associations (CUCRA), an advocacy organization of which the UCB Retirement Center and the EX-Ls are members.

### **Email Addresses**

If the Center has your email address, then we can be sure you are included in email alerts about developments, like open enrollment, that impact the lives of retirees. You can share your email address with the Center by calling 510-642-5461 or writing to [ucbrc@berkeley.edu](mailto:ucbrc@berkeley.edu).

### **Retiree ID Card**

Your retiree ID card gives you access to many campus discounts, use of the campus libraries and other services. The card is free. If you do not have one, call or email the Center or drop by the office between 1 and 4pm any workday.

You are always welcome in our offices. We are conveniently located at 1925 Walnut St. in Berkeley.

Be well!

Patrick Cullinane, Director  
UCB Retirement Center

## LAB UPDATE

Dear Colleagues:

I'm writing today to provide the Berkeley Lab community a brief update on how our strategy is evolving in the Photon Sciences and in the Biosciences areas, and to invite you to attend a talk that I will give on November 7 regarding our exciting—and changing—scientific program and infrastructure initiatives. In several important areas at the lab, new research facilities are under construction or have recently been completed, and we continue to make progress clearing obsolete buildings and creating brownfield sites that can be ready for future program needs. Despite this real progress, not all of our proposals for new facilities are possible in the current funding environment. With focus, planning, and teamwork, however, I am confident that the Berkeley Lab will continue to modernize our scientific infrastructure, build on our leading tradition of serving the national user community, and conduct world-leading research in the national interest.

In Photon Sciences, as you may have heard, the Department of Energy is considering a revised proposal to upgrade the LCLS at SLAC. This upgrade will feature high repetition rates covering the 0.2 to 5 keV photon energy range, as envisioned in our proposal to construct a next generation light source (NGLS), but with substantial cost savings from reuse of existing infrastructure at SLAC. Obviously, I am very disappointed that we are not proceeding with such a facility at Berkeley Lab at this time, but looking at the big picture, we have to recognize the extraordinary national and regional scientific opportunities that will come from having a high rep-rate free electron laser in Northern California.

Looking forward, there is a tremendous opportunity for the Bay Area to be a world-leading center for science using free electron lasers and there is no doubt that it will take the combined talents of SLAC and Berkeley Lab to make it happen. We are working closely with SLAC as potential partners in the construction of the facility and in application of our unique expertise in photon science, computer science, and instrumentation to the LCLS scientific program. Both Labs owe a special debt of gratitude to the NGLS team, which worked so hard to develop NGLS' compelling scientific and technical vision over the past decade. Berkeley Lab, in close partnership with UC Berkeley and the University of California, remains committed to the Richmond Bay Campus (RBC) as a vital hub for energy innovation and science. Together, we are proceeding with a Long Range Development Plan and Environmental Review Process. We anticipate that we

will be releasing the Draft Environmental Impact Report and the LRDP in mid-October. We also expect to have the public hearing on the EIR in November or early December.

Due to current budget realities, however, it appears unlikely that we will be able to start a first phase of biology consolidation at the RBC in the near term. In the meantime, with the urgent need for program integration, we are actively investigating siting alternatives for our biosciences programs, both on the main laboratory campus and elsewhere, to try to reduce the distance between the various programs and reduce the number of sites where people gather to get their research done.

We are also evaluating with UC Berkeley smaller-scale projects that would allow new research activities to begin at the RBC soon.

The Lab's senior scientific leadership is fully engaged in discussions on how to best adjust our strategy in light of these recent developments. On November 7, I will hold an all hands meeting in the B50 Auditorium at 10 a.m. to outline for you several important scientific infrastructure and program initiatives. I believe we can define a compelling vision for the next decades of the Berkeley Lab.

In the lead up to November 7, I welcome input from each of you, and I will be making myself available to hear from you in several forums around the lab. It's wonderful to anticipate that with four new buildings currently in various stages of construction – the Solar Energy Research Center, the General Purpose Lab, the Computational Research and Theory Facility, and the Facility for Low-Energy experiments in Buildings (FLEXLAB)—we are well-positioned to continue our team science approach to tackle some of the most urgent and important scientific challenges for the nation.

Regards,

Paul

--

A. Paul Alivisatos, Director  
Lawrence Berkeley National Laboratory  
Samsung Distinguished Professor of Nanoscience and  
Nanotechnology, University of California, Berkeley  
Director Kavli Energy NanoSciences Institute at  
Berkeley

**SUMMARY OF TALK**  
**AUGUST 15, 2013 LUNCHEON**

**Tamas Torok, PhD**

**Serendipity—My Journey in Microbiology**

Tamas has been a scientist at LBNL for more than 20 years and provided all of us with an engaging account of how he got into the field of microbiology. His talk was like a tour of places not often visited, all in the interest of finding new microbes, or their products, that can be beneficial to mankind.

Tamas grew up in post WWII Hungary and was interested in going to college to study organic chemistry. But things didn't work out as planned. There were limited places at the University of Szeged in Budapest so he was denied entry into college. Being resourceful, Tamas decided the next year to apply to both the U. of Szeged in Budapest and to Humboldt University in East Berlin. As luck would have it, Tamas was accepted by Humboldt but the shock was that there were no slots available in organic chemistry but there were openings in Food Chemistry, i.e., microbiology. Tamas decided that food chemistry was better than no chemistry and so began his serendipitous journey which ultimately brought him to the Berkeley Lab. As Tamas pointed out, serendipity is "luck that takes the form of finding valuable or pleasant things that are not looked for".

After receiving a bachelor's degree in food science, Tamas went on to get a PhD degree in microbiology at the U. Szeged, Budapest. Upon completion of his degree, he joined the faculty at Corvinus U. in Budapest and started his scientific career in microbiology. In 1988 he was invited to work at the USDA Field Station in Albany, CA, for 4 years and when that tour of research ended he joined the Life Sciences Division, LBNL, (1992) where he remained until he moved to the Earth Sciences Division in 2010.

Tamas Torok's lab at LBNL focuses on microbial diversity especially microbes in extreme environments. Lake Baikal is one of the sites he loves to visit and it is a labor of love to be sure. Lake Baikal is the largest, deepest (a mile deep) fresh water lake in the world. It accounts for 1/4<sup>th</sup> of the world's fresh water supply! In order to capture the microbes in the deepest parts of the lake it is necessary to get sample cores from the lake sediment. This is done in the winter so the barge carrying the boring crane gets locked in the lake's ice so it doesn't capsize during boring. Imagine 2-3 weeks at a

time in sub-zero temperatures! Tamas enjoys it and finds the work fascinating. Why? He is searching for microbial products and processes of commercial interest and value. The products of some extreme microbes are useful for bio-medical purposes and Tamas has contributed to many patents held by the Lab.

If Lake Baikal in the winter is the place for extreme cold microbes, Kamchatka, in the Russian Far-East is the home for pristine and unknown microbes in a very hot hydrothermal environment. What a remote place Kamchatka is! It is as long as California but has only one road, 50 miles in length. To get anywhere, a helicopter is needed. This region is the home of the Valley of Geysers where there are hundreds of hot springs and mud pools; got to watch it though, since the geysers range from 38°C (body temp) to 103°C (above boiling). For Tamas, these are bio-prospecting adventures.

These bio-prospecting jaunts have paid off. Naturally occurring lignocellulose degrading microbiota have been identified and studies are now in progress to expedite the cellulose breakdown capabilities of the microbes in an effort to increase renewable fuels from residual plant material.

On a note of interest to many of us was the use of gut microbes, so called probiotics, in yogurt to provide intestinal health benefits. According to Tamas, we really don't know much about how these probiotics work and whether the "bugs" in our yogurts are really effective. Natural fermentation of milk is really very limited to a few areas of the world such as Armenia; but these natural products do appear to improve intestinal health and healing. Our modern yogurt has probiota added after the fact and it is not known how or if they are beneficial.

On a personal note, Tamas observed that his serendipitous wanderings have been very rewarding. He has had once-in-a-lifetime adventures and has been able to contribute to the science and mankind. One of his next adventures will be to the desert areas of Uzbekistan in pursuit of new elusive probiota.

## 25<sup>TH</sup> ANNIVERSARY RECEPTION FOR CSEE (CENTER FOR SCIENCE AND ENGINEERING EDUCATION)

The reception was held in the Building 50 Auditorium on September 26. Rollie Otto – the first regular Head of CSEE and an EX-L's past president and Don Grether (also a past EX-Ls president) attended the event. Laboratory Director Paul Alivisatos spoke about the importance of CSEE in the overall context of the Lab's mission.

The present CSEE Head, Susan Brady, then presided over the rest of the event. Brady showed montages of staff, volunteers, and programs, and in each case asked members of the audience who were in the photos to stand up and, usually, come forward to receive certificates of appreciation or, in one case, newly designed Berkeley Lab T-shirts. Don Grether was recognized for his participation in BLISS (Berkeley Lab in School Settings), as were many others for their participation in BLISS and other CSEE Programs.

The impression Don received from the reception is the importance of volunteers, whether serving as mentors, participating in programs, or helping with planning. It was clear that many people had put in a lot of time participating in one way or another.

At the conclusion of the event Brady made an announcement that had been hinted at earlier - CSEE is changing its name. The new name is Workforce Development and Education Office. (See LBNL/TABL article for the announcement.) The abbreviation, WDEO, does not exactly slip off the tip of one's tongue like CSEE does, but reflects potential changes at the national level in the various federal agencies role in education. Brady did not go into how the change in name (and perhaps focus) would affect WDEO's programs as compared to those carried out by CSEE.

For your edification, the Berkeley Lab's CSEE with its range of internship offerings helps to fulfill one of the Lab's mandates, which is to inspire and prepare this country's next generation of scientists, engineers and technicians. This year more than 70 current and recent college students and almost 20 high school and college instructors participated in a CSEE program, working with Berkeley Lab researchers on science projects spanning from cancer research to cosmology to biofuels. A good example of the success of the CSEE program is

Seno Rekawa, a summer intern from Diablo College when he first visited Berkeley Lab in 1991. Today he is chief engineer for the Center for X-ray Optics (CXRO) and, in turn, mentors summer interns.

EX-Ls members who are interested in learning more about the Workforce Development and Education Office or volunteering for a program can contact Susan Brady at (510) 486-5325 or by email, [SABrady@lbl.gov](mailto:SABrady@lbl.gov). You can find more information about this program on the Lab's web page at: <http://www.education.lbl.gov>.



### TRAVEL TIDBITS

Have you taken any trips lately? They would be of interest to our members. Who knows it might just be enough to get others to travel to interesting places, gone cruising, a safari, etc. I would be glad to print it in the newsletter. You can email me at [lvogel@infionline.net](mailto:lvogel@infionline.net).

Louise Vogelsberg

## GUEST LIST – AUGUST 15, 2013 LUNCHEON

Richard Baker  
Winnie Baker  
Paul Banchemo  
Edward Bennett  
Bill Benson  
Eugene & Myrna Binnall  
Kay Bristol  
Jerry Bucher  
Patrick Cullinane  
Eleanor Dahl  
Diane D'Aoust  
Andy DuBois  
David Edgar  
Kathy Ellington  
Trudy Forte  
Don & Jean Foster  
Angela Gill  
Louis Rivara

Rick Gough  
Donald & Becky Grether  
Connie & Edward Grondona  
Bill Hassenzahl  
Ron Huesman  
Egon Hoyer  
Joe Jaklevic  
Vicky & Richard Jared  
Kathy Jarrett  
John & Ann Kadyk  
Janos Kirz  
Don Landis  
Almon (Bud) Larsh  
Richard LaPierre  
Branko & Ana Leskovar  
Donald & Bertha Miller  
Ken Mirk  
Conway Peterson

Mary Lou Martin  
Rosm MacIntosh  
Martin Pollard  
Mike Press  
Lissa Prince  
Paul Salz  
Patti Powers-Risius  
Daniella Salzman  
David Schenderlein  
Lionel Schour  
Andy Sessler  
Brenda Shank  
Robbie & Mary Smits  
Sandy Stewart  
Bill Turner  
Allan Zalkin

Tamas Torok, Guest Speaker

Raffle Winners: Kathy Jarrett, Bill Benson, Bud Larsh and Winnie Baker

## Pictures From the Luncheon



## THE RED OAK VICTORY SHIP TOUR

On Thursday, August 8, 2013, a group of 20 EX-Lers met at the USS Red Oak Victory class Cargo ship and climb the steep gangplank to meet with former Navy seamen to tour the restored vessel. The ship was launched on November 9, 1944, and is the only vessel built by the Kaiser Shipyards in Richmond that is being restored. The ship saw service in World War II, Korea and Vietnam and has the distinction of being the only ship operated by both military and civilian personnel during her career. She was one of 534 Victories built during World War II, but one of only a few of these ships to be transferred from the Merchant Marine to the United States Navy. She was named after Red Oak, Iowa, which suffered a disproportionate number of casualties in early World War II battles. In 1996, by an Act of Congress, title to the SS Red Oak Victory was conveyed to the Richmond Museum Association. One of the primary goals of the museum was to preserve, restore and develop the Red Oak Victory into a viable asset that can be used, enjoyed and appreciated by the citizens. Most of this has been done and they are working on restoring the boilers to enable the ship to steam around the Bay.

We were led in small groups through the workings of the ship by knowledgeable docents. The informative narratives of what it was like to serve on the ship, and seeing each portion of the ship was interesting, sobering and fun. The interior passages (had to duck your head a lot and step over thresholds), bunk rooms, the bridge, galley, below deck the boiler room and former cargo areas, gun turret (heavy!), gave you a wonderful insight to how the crew lived and worked on this ship. There is a Passport Stamp Station on the Ship for those who collect passport stamps. Rich Sextro wrote a comment about the tours, "For those of you that haven't visited either museum, I highly recommend both. The Red Oak Victory does a Sunday pancake feed as a fund raiser (see website for dates - <http://www.ssredoakvictory.com>).

The ship is located at 1337 Canal Blvd., Berth 6A, Richmond, CA – not far from Rosie the Riveter Museum.

## ROSIE THE RIVETER WORLD WAR II / HOME FRONT NAT'L HISTORICAL PARK

After touring the Victory Ship the group took a small break for lunch and then moved on to Rosie the Riveter Museum. We also had a docent led tour of the museum where the exhibits showed how the community lived, worked and got along in Richmond during the '40s. Many faces, many stories, many truths weave a complex tapestry of myths and realities from this time of opportunity and loss. As the "Greatest Generation" starts to pass into history, a younger generation has rediscovered and has now begun to celebrate the accomplishments of their parents and grandparents in building Roosevelt's "Arsenal of Democracy" that provided the ships, planes and guns to win the war. Go tour the museum. See the many Rosie the Riveter posters, four films are shown about the war. 1) How the shipyards were started, 2) recruitment of 10,000 workers from all across the nation, 3) the women who worked the three shifts per day to build and launch a ship every three days, and 4) the Japanese internment camps and the effect of on the Japanese community in Richmond. These alone are worth seeing. There is a ranger and a few volunteers who were employed at the shipyards during this period who are more than happy to talk to you about their experience. Sextro also wrote, "The museum/national park is just terrific. The museum is slated to get new exhibits in the near future, so go now and then go again later, because apparently some of the materials will change and not be available again."

To learn more about the museum go to: <http://www.rosietheriveter.org/>. Location: 1414 Harbour Way South, Suite #3000/Oil House, Richmond, CA 94804

Hope to see you at the next outing. Vicky Jared

(See pictures on next page)



## **LBL and the Berkeley Solano Stroll**

**September 8, 2013**

LBL participated in the annual Solano Stroll sponsored by merchants of North Berkeley and Albany. The event was kicked off with a parade down Solano Avenue. Exotic food, live entertainment, kiddy rides and informational booths abounded. This yearly event attracts 200,000 to 250,000 strollers and this year the sunshine and warm weather really brought out the strollers; it was a sea of people!

LBL's Public Affairs Office, under the guidance of Armando Viramontes, hosted a booth describing the activities of the Lab and inviting the public to contact them for information on events open to the public. The booth was always busy with interested strollers. The booth was well staffed by Lab staff and student volunteers; EX-Ls members Trudy Forte and Rich Sextro were also volunteers in the booth and helped to pass out literature and answer questions. The large periodic table posters were a real hit and by mid-afternoon they were gone. Both strollers and volunteers enjoyed the interactions.



# EX-Ls Luncheon

Date: Thursday, November 21, 2013

Where: Berkeley Yacht Club, #1 Seawall Drive, Berkeley ← ←←←

Time: Doors Open at 11:30 AM - Lunch Served about 12:00

Bar Service: Opens at 11:30

**Speaker:** Dr. Ellie Blakely, Senior Staff Scientist, LBNL

**Bio:** Ellie Blakely received her PhD degree in physiology from the University of Illinois, Urbana, in 1975. She is currently a LBNL Sr. Staff Biophysicist in the Life Sciences Division. She is an internationally recognized expert in ionizing radiation effects and frequently her expertise is tapped by committees both at the DOE and National Institutes of Health.

**Title: Radiation and Cataracts.** This presentation will review what is known about how ionizing radiations, especially accelerated charged particles, can cause the opacification of the crystalline lens we call "cataracts".

**Catering Service:** R & J Catering, Hayward, CA

**Menu:** Caesar Salad (family style), dinner rolls and butter will be served at the tables along with coffee and water. Hot tea is available on a side table.

**Entrees:** Honey Baked Ham with fruit compote, Au Gratin Potatoes, Stuffed Portobello Mushrooms, Medley of Vegetables, Sweet Yams

**Desserts:** Pumpkin Pie

**Cost: \$30 per person (prepaid)**

Reservations: Computer access to the LBNL/EX-Ls Web page ([www.lbl.gov/EX-Ls](http://www.lbl.gov/EX-Ls)) will also give you the lunch form. Vicky Jared must receive your reservation by Monday, Nov. 18. Please mail form to Vicky Jared, 4849 John Muir Road, Martinez, CA 94553. Please call or email Vicky (925) 228-2145 - [jaredrv01@aol.com](mailto:jaredrv01@aol.com) if you want to sign up or have questions.

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## REGISTRATION FORM

See you at **BERKELEY YACHT CLUB** for the **November 21 luncheon**. Be sure to make reservations by Monday, Nov. 18. Mail To: Vicky Jared, 4849 John Muir Road, Martinez, CA 94553

From \_\_\_\_\_

I Plan to attend the EX-Ls Luncheon: Yes \_\_\_\_\_ No \_\_\_\_\_ **\$30 per person**

I will bring \_\_\_\_\_ guest(s)

Name(s) of Guest(s): \_\_\_\_\_

Menu is Buffet: Advance Choice is not required

Please make check payable to EX-Ls Total Enclosed: \$ \_\_\_\_\_

Willing to carpool: As Rider? \_\_\_\_\_ As Driver? \_\_\_\_\_

Need Help with Buffet? \_\_\_\_\_ Need to sit closer to the Screen? \_\_\_\_\_