SUMMER 2011

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2nd Vice President: Trudy Forte  
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Activities: Vicky Jared  
LBNL Liaison: Armando Viramontes  
CUCRA/AROHE Representative: Janis Dairiki  
UCBRC Policy Board: Richard Sexto, Don Grether  
UCBRC Liaison: Patrick Cullinane  
Editor EX-Ls EXPRESS: Louise Vogelsberg  

**PAST PRESIDENTS:**

Richard Sextro – 2010  
Don Grether – 2009  
Jose Alonso – 2008  
Janis Dairiki – 2007  
John Kadyk – 2006  
Gene Binnall – 2005  
Sig Rogers – 2004  
Bob Fulton – 2003  
Bob Birge – 2002  
Per Dahl – 2001  
Tom Beales – 2000  
Ken Mirk – 1999

**WELCOME NEW MEMBERS in 2011:**

Robert Belshe  
Ike Turiel  
Ron Yourd  
Marcy Santana

Gloria Lozano-Acosta  
Diana Morris  
Tom Henderson

**EX-Ls Honorary Life Members:**

Shirley Ashley  
Esther Colwell  
Inge Henle  
Bud Larsh

**Official Address:**

LBNL EX-Ls  
530 Curtis Street  
Albany, CA 94706

**Photo Site:** [www.picasaweb](http://www.picasaweb)  
**Photo Czar:** Ned Dairiki  
**Website:** [www.lbl.gov/EX-Ls](http://www.lbl.gov/EX-Ls)  
**Webmaster:** Richard Baker (xrobaker@comcast.net)

**MEMBERS WITH NO CURRENT ADDRESS**

Tom Elioff  
Elliott Hewitt

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

**CALENDAR OF BOARD MEETINGS & LUNCHEONS:**

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Board Meetings start at **3:00** on the dates listed above, usually in **54-130B** (that’s in the conference room addition to Perseverence 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.
For the past few months the EX-Ls leadership has been planning for the future as we anticipate changes in the needs of the membership as well as how we communicate with the members and LBNL. You may be getting this EX-Ls EXPRESS by email only for the first time. We hope that you will take the time to download the PDF file to either read it on your computer or to print the PDF file. You always have the option of reading the news letter online or downloading the news letter as a PDF file from the EX-Ls web site which can be found under EX-Ls in the A-Z index of the Berkeley Lab web site. We have a close relationship with the UC Berkeley Retirement Center (UCBRC) and with their assistance the EX-Ls sponsored a survey of LBNL retirees. There are over 2000 LBNL retirees of which UCBRC has about 500 email addresses. Every effort was made to contact all Berkeley Lab retirees. We look forward to a report on the survey which will summarize the information; we will share this information with our membership. A very big thank you to the Ad Hoc Survey Committee, Janis Dairiki (Chair), Rich Sextro, Vicky Jared, Joe Jaklevic and Don Grether. It takes determination and real commitment to go from deciding that a survey is a good idea to actually getting it out and then pressing to get as many responses as possible. As mentioned in the spring newsletter we are seeking a closer relationship with the Lab management. Early returns of the survey indicate that, after retirement, LBNL retirees continue to be active both professionally and within the community which is a direct benefit to Berkeley Lab. Director Paul Alivisatos has a strong interest in community relations and Berkeley Lab retirees continue to cast a positive light on the Lab. EX-Ls can be a partner to the Lab for communicating with Lab retirees. EX-Ls has provided volunteers for Lab outreach activities in both education and community events like the Solano Stroll (will be held on September 11). Berkeley Lab will have an open house October 15, and EX-Ls is seeking volunteers for that event as well. Finally EX-Ls is encouraging the Lab administration to re-establish a reception for recent retirees on an annual basis and is offering our assistance in the event. The EX-Ls Board of Directors remain committed to respecting your privacy and have strict rules for the use of our members email list and for approval of email notifications to members. However, we hope to use email more frequently than in the past to inform you of social events of interest and opportunities for assisting Berkeley Lab’s Public Affairs for community relations. Therefore we hope that you will provide us with an up-to-date email address. It’s good to know that so many retirees are finding happiness and fulfillment in retirement.

Hope to see you at the next lunch August 18 at Spenger’s Fish Grotto. We have spoken with the management and expect that service will go smoothly after it rained on our parade in more ways than one at the winter lunch event.

Wishing you the best
Rollie Otto, 2011 EX-Ls President

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In January, the University of California issued a Request for Qualifications on behalf of Lawrence Berkeley National Laboratory inviting interested parties to propose sites that might be suitable for a Second Campus location. The proposed Second Campus is an effort to consolidate laboratory programs currently in leased spaces spread throughout the Bay Area and provide room for future Lab growth as the Laboratory pursues its scientific research mission. In May, after careful evaluation of the merits of each submittal, the university released a list of six potential sites for the proposed Second Campus. Six finalists, were chosen based on their ability to meet multiple criteria in the RFQ, including a location within 20 to 25 minutes of LBL, the capacity to accommodate potential future growth, easy access to public transportation and other amenities. A decision on a preferred site is scheduled for late November, with occupancy scheduled for 2016. The Lab is currently in the middle of hosting community meetings at each of the proposed sites in Berkeley, Emeryville, Albany, Oakland, Richmond and Alameda. A schedule of the community meetings and regular updates on the Second Campus process is available at [http://www.lbl.gov/Community/second-campus/index.html](http://www.lbl.gov/Community/second-campus/index.html)

Armando A. Viramontes
Community Relations Representative
Lawrence Berkeley National Laboratory
(510) 486-6251
The LBNL retiree survey (designed and administered by the EX-Ls) was launched on June 11 when an email message with the survey link was sent to the 500 LBNL retirees for whom the UCB Retirement Center has email addresses. The Center included a special insert for all ~2300 Lab retirees in the paper copy of its June newsletter, the Centerpiece, informing them of the survey and including a link to it. Reminders were then sent by email in mid-June and again in mid-July. A postcard reminder was mailed to the ~1800 Lab retirees for whom the Center does not have email addresses on July 16. As of this writing (July 21), 350 responses (15% response rate) have been received. The deadline for the survey has been extended until July 31 in the hope of getting an ~20% response rate.

If you have already completed the survey, thank you! Aggregate results will be posted on the EX-Ls website (http://www.lbl.gov/EX-Ls/) in the fall. If you are in the nearly 50% of the EX-Ls who have not yet completed the survey, we really want to hear from you; and there is still time as the **deadline for the survey has been extended to July 31** (with wiggle room into early August). So do it now – go to: https://www.surveymonkey.com/s/EX-Lsurvey

We will use the results of the survey to create as broad and comprehensive a picture of Lab retirees as we are able and share this with all of you on the website. We will also share the aggregate results with Lab management so they are aware of retirees’ continuing contributions. The results will help the Lab with its goal of improving the Lab’s relationship with the community (Lab retirees as ‘ambassadors’) and will make retirees more visible within the LBNL community. In addition, the results will also help the EX-Ls and the UCB Retirement Center ensure that ongoing and new programs meet the needs and interests of Lab retirees.

Janis Dairiki

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**OUR ANNUAL CHARITABLE DONATION**

Ever since 1984, the EX-Ls has made an annual donation of approximately $1,000 to a deserving charity. The recipient organizations have usually reflected some aspect which you might call “healthy aging”. More specifically, the recipient groups have included *Health and Medical services* and *Science Research and Education*. Examples include the Over 60 Medical Clinics in Berkeley, various hospice groups, and the Lawrence Hall of Science. We have also responded to one-time crisis situations, e.g. donations to the Red Cross for the earthquake in Haiti in 2010 and for the earthquake and tsunami in Japan this year. At the July Board of Directors meeting, we discussed the idea that perhaps we might want to consider donating more often to local charities within the general categories noted. Going forward, we plan to review every potential recipient charity via the Charity Navigator website (see http://www.charitynavigator.org/). This website shows what percentage of the dollars donated goes to the actual cause vs. administration and other expenses. With all of this in mind we would like to know if you have a favorite charity, local or not, that is focused on some aspect of “healthy aging”? Please contact our Treasurer, Suzanne Stroh with your suggestions. She can be reached at 510-524-1953 or scstroh@gmail.com

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**NOMINATING COMMITTEE**

A Nominations Committee has been established to provide for the nomination of EX-Ls officers.

Members of the committee are:
Trudy Forte, 2nd VP, Chair
Jose Alonso
Joe Jaklevic
Rollie Otto
Suzanne Stroh

At this time, our first order to business is to nominate the future 2nd Vice President of our organization as I move up to take on the role of 1st VP in January 2012.

We would like to solicit suggestions from our members for potential candidates for this position. Don’t be shy, if you are interested in becoming part of the leadership of the EX-Ls we would like to hear from you. The major role of the 2nd VP is to chair the Nominations Committee; as a member of the Board of Directors, the 2nd VP is involved in decision-making on old and new matters of business taken up by the Board. Current members of the Board are listed in the Newsletter. They are a committed group of people interested in the future of our organization.

If you have a suggested candidate, please contact me by email or phone no later than August 31, 2011.

Email: tforte@chori.org
Phone: 510-526-0405

Trudy Forte
SUMMARY OF APRIL 27-28, 2011 CUCRA AND CUCEA MEETINGS

The joint meeting of CUCRA (Council of UC Retiree Associations) and CUCEA (Council of UC Emeriti Associations) was held at UCLA April 27-28, 2011. The two groups met together on the morning of April 28 and CUCRA met separately in the afternoon.

Christine Littleton, Vice Provost for Faculty Development and Diversity and Professor of Law and Women’s Studies welcomed the combined group in the morning. She acknowledged the University of California as the single largest public research university and saluted retirees for their contributions.

UCOP – Budget and Pension and Health Update. Gary Schlimgen (from the President’s Office – UCOP) noted that the “state budget is terrible” and $500 million is the proposed cut for UC. (Since that time the cut has increased to $650 million.) The annual state contribution of $14 million to retiree health has been cut to $7.1 million for this year.

Different ways to deliver benefits in light of the budget and health care reform are being discussed as a possible way to save money. ExtendHealth is one such option (basically outsourcing health care) and members of that 5-year-old, privately held, for-profit company based in Utah made a presentation to the meeting. There was not much enthusiasm for this program among the CUCRA and CUCEA attendees. UC retirees at LLNL have been served by ExtendHealth for a while and have been uniformly dissatisfied; the health benefits do not “match” those of UC retirees’ current health benefits and the quality of the service is not satisfactory. Marian Gade, Chair of CUCRA, wrote an excellent letter to UCOP after the meeting, summarizing CUCRA’s discussion and concerns. It was the sense of the meeting that retirees are very satisfied with how their health care benefits are administered now.

A few interesting facts: 53,000 retirees receive medical/dental coverage (35,000 retirees, 18,000 dependents); 37,000 retirees have Medicare with UC as secondary; 8700 (16%) retirees use Kaiser, 2700 retirees are out-of-state.

UCOP – Customer service Report. Beginning July 1, UCOP will no longer provide monthly paper benefits statements to all retirees. Currently, 55,000 benefits statements are mailed each month; 51,000 retirees have direct deposit arrangements with their banks. Reducing the number of paper statements only to those requested by retirees (using an “opt in” approach) will result in savings of over $300,000 per year. See the latest edition (May 2011) of New Dimensions for further information and directions for accessing your account and your benefits statements.

CUCRA now has a Website – Check it out at: http://cucra.ucsd.edu. You will find the agendas and minutes of recent meetings as well as reports from each campus. You will also find information about travel programs arranged by Rosemary Norling, organizer of the CUCRA Travel Group. The Travel Group works with Collette Vacations of Rhode Island which is also the official travel group for the Smithsonian. The commissions earned whenever a CUCRA member travels with Collette Vacations are given to CUCRA.

Staff Retiree Surveys – UCLA distributed surveys to 5770 staff retirees through two USPS mailings late last year. Total responses = 1506 (26%); 2/3 from medical enterprise retirees, 71% female; average number of years retired from UCLA=12. About 20% were still working for an employer (including UC) or were self-employed. They prepared a very nice report of their responses and results. Eddie Murphy, Director of the Emeriti/Retirees Relations Center (ERRC), and her group met with the UCLA Chancellor to provide information and results; he was most interested in the community service component. UC Davis conducted a similar staff survey via SurveyMonkey and USPS. A total of 373 retirees completed the survey for a 29.5% return rate. Results were similar to those at UCLA. I spoke briefly about the EX-Ls survey which was then still under design. Having the UCLA and Davis surveys and results was a big help in completing our survey design.

Next joint meeting will be at UC Davis on Oct. 27, 2011 (CUCRA) and Oct. 28, 2011 (CUCEA and joint CUCRA and CUCEA meeting).

Janis Dairiki
EX-Ls CUCRA Representative
NEWS FROM THE RETIREMENT CENTER

We have been pleased to help the EX-Ls develop, distribute and collect responses to their retiree survey. We hope you have responded to the survey. The information will not only be useful to the Lab and the EX-Ls but also to the Center and UC. Combining the EX-L results with the results of the Center’s recent survey, we will be better informed on the needs, resources and continuing contributions of our retirees.

Service Volunteer Opportunities: There are two services, volunteer opportunities available that you may want to consider. One is with the campus Landscape Architect. He needs help in editing and updating the popular “Trees of the Berkeley Campus” and in developing thematic walks of campus highlighting the trees from all over the world. Contact Jim Horner at jhorner@cp.berkeley.edu.

The other opportunity is with a research study at the Haas School of Business. The researchers are studying how economic decision-making changes over the lifespan. Participants receive a stipend from $15 to $35. Contact Ming Hsu at 510-642-1686 or mhsu@haas.berkeley.edu.

Fall Learning in Retirement (LIR) Series: Watch for your fall Center newsletter, the CenterPiece, which should arrive around the first of September. In addition to other interesting fall activities, in September with our LIR Committee, we will offer a four part series tentatively titled The Biology of Group Violence: How Changeable is Human Nature? More details on this free series will be forthcoming.

Pre-Retirement Planning Program: Again this fall semester, the Center will offer its seven part series on planning for retirement. This well received program is free and open to Lab employees. It is designed for employees who are approximately five years from retirement -- http://thecenter.berkeley.edu/prp.shtml. The EX-Ls have helped educate current employees to this free resource which has enabled more and more of them to take advantage of the program. Tell any current employee you know that is contemplating retirement that they can contact the Center at 510-642-5461 or ucbrc@berkeley.edu and ask to be placed on the notification list for the fall program.

Cal Connections: Lastly as a retiree, you can access a wide variety of campus related program discounts through our Cal Connections. To review these discounts go to http://thecenter.berkeley.edu/connect.shtml. A summary list is also on p. 2 of the Center’s summer newsletter. Show your retiree ID card to access the discounts. If you need an ID card, contact the Center and request one. They are free.

All the best wishes for an enjoyable, informative and safe summer season.

Patrick Cullinane, Director
UCB Retirement Center

ELDER WISDOM CIRCLE

Want to volunteer on your schedule and from your own home? If you have Internet access, you can be part of an exciting and worthwhile volunteer opportunity. Elder Wisdom Circle is a Bay Area based national non-profit organization and one of the most popular online advice providers in the country. Made up of senior volunteers (60 or better) who hand out practical advice to younger generations via the Internet, Elders are naturally positioned to have wisdom derived from age and life experiences, not solely from their professional backgrounds. Questions received range from relationship to school problems, from family struggles to career guidance, and just about everything in between.

The application process includes composing two sample responses. Applicants are screened for the ability to offer sound, empathic advice that does not promote a political or religious agenda. For more information visit them at www.ElderWisdomCircle.org. To apply please visit the ‘Offer Advice’ page.

If you prefer to speak with someone on the phone, you may call Doug MecKelson at 925-945-8814
**IT'S NOT NECESSARILY A JUNGLE OUT THERE**

*Trip to Africa by Dave and Sally Stevens*

This is being written as something of a complement to Don Grether’s report of time spent in the jungles of Uganda, being some reminiscences of a couple of weeks Sally and I spent in four safari camps in southern sub-tropical Africa (two in Botswana, one each in Zambia and Zimbabwe), and some of the oddities encountered therein.

I should say at the outset that the Botswana we saw is not, except in passing, the Botswana of The Ladies No. 1 Detective Agency, because Mma Ramotswe operates primarily in Gaborone, the capital, down in the southeast corner of the country. We were in Chobe National Park and the Okavango Delta, at the northern end of the country. The history of Botswana, and its current cartographical shape, are marked by several interventions by Great Britain, beginning with the establishment of the British Protectorate of Bechuanaland in 1885. We were told that this was at the request of the local population, who were suffering from incursions by Boers from the south and Ndebele from the north, and that the British were reluctant at first because they saw no prospect of recovering their costs – Botswana at the time was a very poor country – and it was only by ceding a large chunk of the southern part of the country directly to the Brits to be incorporated into South Africa that a deal was made.

At that time, Botswana (Bechuanaland) had common borders with what are now Angola and Zambia, but if you look at a map of Botswana today, you will see that there is a long pan-handle from Namibia that separates Botswana from its former northern neighbors. That is the Caprivi Strip, which was ceded to Germany in 1890, together with Heligoland (an island in the North Sea), in exchange for Zanzibar. The German intent was to provide a link between German Southwest Africa and German East Africa, but Victoria Falls proved an impenetrable barrier and the German colonies remained isolated. (Namibia, Zambia, Botswana, and Zimbabwe meet at the end of the Caprivi Strip: the only place in the world where four countries meet.)

More recently, when independence started seeming like a good thing, the British conducted a mineral survey to make sure that they weren’t leaving anything valuable behind. They found nothing, and granted independence. But then, a couple of years later, a Botswana survey found the richest diamond deposit in the world. So now, instead of being one of the poorest countries in Africa, Botswana is one of the richest. (And there are some rather embarrassed English geologists.)

But it is still mostly desert, and some of it is very strange desert, indeed. Where we were, along the Chobe River and at the edge of the Okavango Delta, things were relatively lush because it was the dry season. (Yes, dry season.) The local rivers, the Zambezi and Chobe, reach their highest flood stages during the dry season, because they are fed from rainfall in the Angolan highlands, and it takes the water four to six months to work its way down to the Delta and the confluence of the Chobe and Zambezi. The Zambezi floods higher than the Chobe, so at high water the Chobe is flowing upstream into its floodplain, the Okavango Delta. The Delta was formed when the tectonic plate on which it rests subsided between two parallel faults; it is the largest oasis in Africa, nearly as large as Connecticut and Rhode Island combined, and in flood is basically a huge swamp, with the water only a few centimeters deep over most of its extent. Transportation is via makoro, a shallow canoe that is poled along rather than rowed or paddled.

One of the more interesting inhabitants of the Delta is the jacana, or Jesus bird – so-called because it walks on water. Or appears to; it really walks on lily pads. The female jacana is polyandrous, and lays four eggs in whatever nest she can find, and then abandons them to the care of the males. When they hatch, they are easy prey for raptors, so the males put one under each wing called because it walks on water. Or appears to be floating on water. If you look closely, you can see its webbed feet. The excess tannin releases gasses that flow downwind, and warn other trees that a hazard is on the way. As a result, elephants feed upwind.

This is a land of weird animals, too many kinds of antelope, and too many ‘oo’ words. There can be few animals weirder than warthogs, ostriches, or giraffes, and among the antelope, it is very difficult for us novices to distinguish among impala, puku, red lechwe, steenbok, Reed buck, duiker, and bush buck, and that’s just among the species we saw. All are basically tan and all but the impala are shy, so they generally don’t stand around and let us compare at leisure. We encountered only two animal ‘oos’ – kudu and puku – but several birds, whose calls are something like “oo-oo”: hoopoe, boubou, cuckoo, and coucoul. (And then there is the ubiquitous turtle-dove, with its oooo-oo-ooo. . . .) I even had trouble distinguishing ostriches from elephants at a distance; those long necks can seem very trunklike. Some animals are loners or stick with their kind – elephants,
for example – but some are quite happy to mingle. We particularly noted that zebras were often found in company with
warthogs, buffalo, wildebeests, giraffes, and even, near a water hole, the occasional hippo.

Elephants are pretty weird, too. Besides their tusks, they have only 4 teeth at any one time: one each upper and lower molar on
each side. They have six sets of these teeth, with each new set being larger than its predecessor, and each new set comes in
when the previous set is worn out. When the last set is worn out, the elephant dies of starvation as, probably, a sexagenarian.
They vocalize only rarely, with a near-subsonic rumble being far more common than a trumpet.

There were few flowers where we were; what color there was was supplied by birds: a number of very bright glossy starlings,
the crimson-breasted shrike, and several jewel-like kingfishers. (Of our “safaris”, one was on the Delta in makoros and two
were on rivers: one on the Chobe and one on the Lufupa, in Zambia.) Vultures, eagles, and hawks were far more common than I
expected. They and the jackals and the hyenas (which last we did not see) do an excellent job of ensuring that there are no
rotting carcasses, or even very many bones, left lying around.

We certainly saw more than 100 species – animal, bird, reptile, and insect – that we could not find in the US outside of a zoo,
and that includes not a single mosquito! (We did encounter tse-tse flies in the long grass of Zambia, though. We are told that
sleeping-sickness has been eradicated, but the bite of tse-tse is painful, so strong DEET is still recommended if one ventures
into the bush in Zambia.) We would have seen much less had we been on our own, however. Even while negotiating the
roughest of tracks the guides would keep at least one eye peeled for a sign of an interesting animal or bird, and they would have
it identified before we could distinguish it from the nearest bush, tree-stump, or termite mound.

There was one unexpectedness that was related to the animals only indirectly: This is a region that observes siesta. Our usual
schedule was 5:30 or 6:00 wake-up; breakfast; morning game-drive with snack break (and time for the men to mark territory
and the women to pick flowers); lunch; siesta (there’s usually not much to see in the way of animals in the heat of the day);
high tea, with instructive historical or cultural lecture; afternoon/evening game-drive, with sundowner break; (if dark, as it often
was) a night game-drive back to camp; attitude-adjustment and dinner; escort to cabin by 8:30 or 9:00. The camps we visited
were of a uniformly high standard, consisting of reinforced tent cabins with en suite toilet and shower, and the food was
excellent. One is not, however, allowed to walk freely around the camps: They were unfenced, in national parks where the
animals have the right of way, and while daytime walks along established paths are permitted, no unescorted walks are allowed
at all after dark.

I believe we were fortunate to go in the early dry season (i.e., after the rains and before winter sets in); not only did we get more
temperate weather, but having the rivers in spate was a real plus: Victoria Falls was thundering full across most of its (1700-
meter) length, unlike in the wet season, when one can swim on the edge of the trickle that remains. (We did not take the bungee
jump from the bridge below the Falls, but we did do a zipline ride from the side of the gorge to a receiving station three-quarters
of the way across the bridge.)
The speaker was Dr. Robert Budnitz, a physicist and nuclear power expert, who described events surrounding the recent Japanese earthquake and tsunami and their subsequent impact on the disaster at the Fukushima nuclear power complex. Bob is an Ex-Ls member with a long time association with LBNL. We were fortunate to have available a speaker like Bob who spoke knowledgeably and with authority on these complex issues.

On March 11, a magnitude 9.0 earthquake struck 70 miles off the Japan coast, and the fault rupture was 250 miles in length. It was the most powerful quake in recorded history going back 2000 years. A subsequent tsunami, also of record breaking magnitude, struck the coast approximately 45 minutes later. The disaster resulted in over 26,000 fatalities and hundreds of billions of dollars in damage. A major event within this nationwide catastrophe was the severe damage experienced at the Fukushima reactor complex. During the weeks and months since, there has been an evolving narrative in the media concerning the scope and consequences of this major nuclear disaster. In his talk, Bob presented a detailed description of these events and expert analysis of their implications.

At the time of the quake, three of the six reactors at the site were operational. Immediately following the initial quake, all six of the reactors were shut down, the chain reactions quenched, and they were configured for sustained stable operation. The event that initiated the disaster was the arrival of the tsunami. Although there are sea walls constructed at many locations along the coast in anticipation of such events, the size of the March tsunami exceeded by a large factor the height of the protective barrier at most sites along the coast including the reactor complex. Significant flooding resulted.

The major problem with maintaining reactors in a stable shutdown configuration is removing the heat generated in the core due to the residual radiation in the fuel. This source of heat is still significant particularly immediately after shutdown and if not removed can build up to the point of melting the reactor core. Normally, cooling water is continuously circulated through the system using pumps driven by power from the electrical grid. Since the grid had been disabled by the original quake, the system was relying on power from auxiliary diesel generators at the time of the tsunami.

Some of the diesel generators were located in a position where they were swamped by the tsunami wave and others were rendered inoperable due to failure of the flooded switching system. There was yet another set of backup cooling systems that used steam generated by the residual reactor heat instead of AC power. These backup systems failed after a short interval due to loss of battery power for their control systems. Other ad hoc approaches to cool the cores were only marginally successful.

Ultimately the level of water in each of the three reactors fell to a level that exposed the cores. A runaway exothermic reaction between the hot Zirconium fuel rod cladding and the steam surrounding the exposed fuel rods resulted in the generation of large amounts of hydrogen in addition to increased heat. It was the escape and ignition of the highly explosive hydrogen gas that caused the destruction of the buildings and the escape of some gaseous radioactivity in the days following the initial disaster. Subsequent uncontrolled heating of the core resulted in at least partial meltdown of the fuel assemblies in three reactors.

In the days and weeks following the accident, cooling has been restored to the reactors using “jury-rigged” equipment and, although there was some escape of radioactivity through outflow of water, the three reactors are now in a stable configuration. However, that statement cannot be made even today without caution, because other failures might occur, caused for example by possible earthquake aftershocks or by failures of other equipment.

If the current stable situation can be successfully maintained, it is expected that the damaged reactors will eventually be disassembled and the damaged radioactive components buried safely. This may take several years to accomplish and is expected to be very costly. No reliable estimates of the cost or the time frame for this are now available.

Because the Japanese government acted quickly and the Japanese population has responded responsibly, a very effective evacuation of the area surrounding the damaged reactors occurred and is being maintained. Therefore, even though there is a huge financial impact from this disaster, no members of the public have been exposed to important doses of radioactivity.

The impact of this accident on the operation of other similar reactors and on the future of nuclear power is difficult to estimate. The Fukushima disaster points to the difficulty in designing systems that are immune from the impacts of catastrophic natural disasters that occur infrequently. Concerns for nuclear reactor safety throughout the world have increased as a consequence. Dr. Budnitz pointed out that there are 104 power reactors in the US of which 23 are boiling water reactors of similar design to the Fukushima versions. One immediate effect will be that lessons learned through discovery and analysis of the recent failure modes will be used to evaluate and improve the safety of other, similar reactors. The larger question of the future of nuclear power is extremely complex and difficult to predict.

A version of a similar presentation by Dr. Budnitz delivered to the Earth Science Division on 24 July can be viewed at the following website: http://earthsciences.typepad.com/blog/2011/06/the-fukushima-nuclear-reactor-accident-what-happened-and-what-does-it-mean.html
ATTENDEES AT THE MAY LUNCHEON AT BERKELEY YACHT CLUB

Gloria Acosta
Jose Alonso
Bob Avery
Richard Baker
Winifred Baker
Edward and Mildred Bennett
Bill Benson
Manjeshwar Bhat
Kay Bristol
Robert and Barbara Budnitz
John Cahoon
Hattie Caldwell
Donald and Patricia Cowles
Partick Cullinane
Janis and Ned Dairiki
Andy DuBois
Karen Faircloth
Ben and Mary Feinberg
Polly Fleischer
Trudy Forte
Basil (Jack) Gavin
Maggie Gee
Norman Goldstein
Rick Gough
Harvey Gould
Hal Grabaski
Donald and Becky Grether
Connie and Edward Grondona
James Haley
Lilian Hawkins
Harry Heckman
Ingeborg Henle
Egon and Annette Hoyer
Arlon and Donna Hunt
Calvin Jackson
Vicky and Richard Jared
Joe Jaklevic
Blair and Kathy Jarrett
A. David Johnson
Philip Joukoff
John and Ann Kadyk
Joseph Katz
Matt Kotowski
Ginny Lackner
Glen and Jean Lambertson
Almon (Bud) Larsh
John and Barbara Lax
Branko Leskovar
Douglas McWilliams
Robert (Bob) Miller
Ken Mirk
Nancy and Vic Montoya
Mack and Ann Morgan
Marty Morimoto
Rolf Muller
Charles Ogden
Karl Olson
Jeannie Ortiz
Fred Perry
Conway Peterson
Art and Lucille Poskanzer
Terry Powell
Mike Press
Don Rising
Stephanie Roth
Robert (Bob) Schmieder
Clay Sealy
Rich and Joan Sextro
George and Irene Shalimoff
Brenda Shank
Robbie and Mary Smits
Karen Springsteen
Greg Stover
Shirley Streshinsky
Suzanne Stroh
Clyde Taylor
Diane Thielvoldt
William Thur
Isaac and Ellen Turiel
Irma Vogel
Louise Vogelsberg
Lee Wagner
John and Lillia Yamada
Ron Yourd
Allan Zalkin
The Laboratory’s Health Care Facilitator (HCF) Program hosted a successful Seventh Annual Summer Wellness and Meet-the-Clubs Fair at the Laboratory on June 9, 2011. The HCF Program is designed to expand health plan customer service to members who are experiencing difficulty dealing with their health care providers in the areas of care access, administrative, benefits coverage, and consumer education issues. The purpose of the Wellness Fair is to have access to health care representatives and other organizations on-site so employees can pick up information or discuss health plans. Also, various LBNL clubs, who promote exercise and dance activities, are represented to encourage employees and retirees to join their group. EX-Ls participated as an organization that provides a means of maintaining ties both to the Lab and with other retirees, and allows access to a variety of activities.

Vicky Jared, Janis and Ned Dairiki represented EX-Ls at the Fair and had a table set up with our Newsletters, photos of lunches and events, brochures to hand out and cookies and candy to give away. It was a good day (warm) with the usual health care vendors present to answer questions and hand out promotional items. Various Laboratory Employees Activities Association clubs performed, good rock & roll music in the background and a fairly good crowd attended. The chocolate chip cookies were the big hit with all ages.

Laboratory Employee Activities Association clubs represented were: Hula Hoop Troupe, Ukulele performing group, Swing and Salsa Dance, and Filipino Martial Arts. A few of the health care companies represented were: Delta Dental, Fidelity, Health Net, Kaiser, Liberty Mutual, Patelco, Prudential and UCB. We think it would be great if the EX-Ls could perform on the stage next year -- that would draw even more attention to our group and we know we have a lot of talented people. Any volunteers?

Next year you will be notified of this event so you may have the opportunity to come to the Lab and pick up information or ask questions from these reps in a one-stop shopping environment.

UCBRC’s table was next to EX-Ls so we could share talking with participants. I would say UC had about 25 people sign up for the pre-retirement consultation. Vicky and Janis gave away several brochures to potential retirees and a few already retired, but not members.

Janis gave EX-Ls brochures to a representative from HR; so in doing this we know that all retirees will continue to receive our brochure in their retirement packet.

Photos of the event can be seen on our Picasa photo web site: http://picasaweb.com/EXLpics.

Vicky Jared
EX-Ls Activities Coordinator, 06-15-11
Luncheon Speaker for August 18th
Doug McWilliams, Professional Photographer
"EVERYWHERE I LOOK I SEE PICTURES"

Many of us remember Doug McWilliams as the LBL photographer who documented major and minor Laboratory events over much of his 30 plus year career. What few of us may know about is his love of baseball and how it led to a parallel and spectacularly successful career as a sports photographer.

Doug McWilliams' love of professional baseball led him into photography at age 12 where he enjoyed photographing the players from the Oakland Oaks. By the time he was 16 he was able to sell some of these images as a professional. This led him on a path which led to the study of photojournalism at the University of Kansas followed by a degree in photography from the Brooks Institute. He came to the "Rad Lab" in 1960, where he fell in love with the challenge of Scientific / Industrial photography, staying for 31 years. Doug re-discovered pro-baseball in 1969, at a picture day with the Oakland A’s. Then in 1971 he began shooting ball players for baseball cards, and was off for a 40 year ride that ended at the National Baseball Hall of Fame and Museum in Cooperstown, NY, last summer.

His talk will highlight some of these events together with other recollections from his career as a photographer. His chosen title gives some indication of the unique view of the world which he will share with us.
EX-LS LUNCHEON

Date: Thursday, August 18, 2011
Where: SPENGER'S FISH GROTTO, 1919 Fourth Street, Berkeley, CA 94710
Banquet Room: Pacific/Atlantic Rooms - Doors and Bar open at 11:30 am
Lunch Served: At 12:00 noon

Speaker: Doug McWilliams, Former LBL Head Photographer and Member of EX-Ls

Title: “EVERYWHERE I LOOK I SEE PICTURES” Doug McWilliams will highlight his 30 plus year career as a LBL photographer, and 40 years taking photos of baseball players for baseball cards. He will talk about some of these events together with other recollections from his career as a photographer. The chosen title gives some indication of the unique view of the world which he will share with us.

Spenger's Menu: Choice of one of the following entrees:

1. Bay Shrimp Louis Salad with 1000 Island Dressing - Clam Chowder Soup
2. Grilled Chicken Breast Marsala with Polenta - Lunch Salad
3. Seasonal Vegetable Platter – Marinated and Grilled with Herb Sauce and Polenta – Lunch Salad
   Dinner Rolls, Coffee and Tea Service and Chef’s Seasonal Cheesecake

Cost: $25 per person (prepaid)

Reservations: Computer access to the LBNL/EX-Ls Web page (www.lbl.gov/EX-Ls) will give you the lunch form. This form is also included here. Vicky Jared must receive the luncheon reservation by Monday, August 15. The form should be mailed to Vicky Jared, 4849 John Muir Road, Martinez, CA 94553. Please call or email Vicky (925) 228-2145 - jaredrv01@aol.com if you want to sign up or have questions.
See you at **SPENCER’S FISH GROTTO** For the **August 18 luncheon**  
Be sure to make reservations by Monday, August 15, 2011  
Mail To: Vicky Jared, 4849 John Muir Road, Martinez, CA 94553

From_____________________________________________________________  
I Plan to attend the EX-Ls Luncheon  Yes_____ No_____  $25 per person  PREPAID  
I will bring __________ guest(s)  
Name(s) of Guest(s): ___________________________________________________________________  
Menu Selection:  Chicken Marsala [ ]  Shrimp Louis [ ]  Vegetarian Menu [ ]  
Please make check payable to EX-Ls  Total Enclosed: $___________  
Willing to carpool:  As Rider? __________  As Driver? __________  
Need to sit closer to the Screen? __________  Other: ______________  

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**If you would like to discontinue receiving e-mails** from the EX-Ls please send an e-mail to  ROBaker@lbl.gov  with the word "Unsubscribe" in the Subject line. Include your name and your e-mail addresses in the body of the e-mail.  
**If you would like to change your e-mail address** please send an e-mail to  ROBaker@lbl.gov  with the words "Address Change" in the Subject line. Include your name and the old and new e-mail addresses in the body of the e-mail.