

## **LBNL COMMUNITY ADVISORY GROUP (CAG)**

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### **CAG Meeting Summary**

Monday, January 9, 2012

6:00 pm – 8:30 pm

North Berkeley Senior Center

#### *CAG Members Present:*

Christopher Adams, Community member

Wendy Cosin, City of Berkeley Planning Department

Rebecca Daly, UC Berkeley student

John DeClercq, Berkeley Chamber of Commerce

Marcos Gandara, Community member

Paul Licht, UC Botanical Garden

Emily Marthinsen, UC Berkeley

Dean Metzger, Berkeleyans for a Livable University Environment (BLUE)

Phil Price, LBNL employee

Carole Schemmerling, Strawberry Creek Watershed Council

Rich Sextro, Community member

Elizabeth Stage, Lawrence Hall of Science

Anne Wagley, Community member

#### *CAG Members Absent:*

LeRoy Blea, Berkeley Community Health Commission

Andreas Cluver, Building & Construction Trades Council of California

Whitney Dotson, Community member

Mark McLeod, Buy Local Berkeley

Phila Rogers, Community member

### **Welcome and Introductions**

Daniel Iacofano of MIG welcomed Community Advisory Group (CAG) members and community members, and invited CAG members and LBNL staff to introduce themselves. The agenda for the evening included the on-going update on proposed and possible future capital construction projects, as well as an update on the Second Campus selection process and a presentation on the Lab's Science Education and Outreach to Public Schools.

### **Second Campus Update**

Sam Chapman provided an update on the Second Campus site selection process. At the time of this meeting the Lab was still in its deliberation phase and planned to announce later in the month. As there was no other news on the site selection process, Sam welcomed CAG comments.

#### *CAG Member Questions and Comments:*

The following is a summary of CAG member requests and concerns related to Lab capital projects recently proposed or underway:

- Is the Lab still undecided or not yet ready to make the announcement?

## LBNL COMMUNITY ADVISORY GROUP (CAG)

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- *Lab Comment:* Through the process of evaluating the various alternatives, the Lab has narrowed down potential options, but is not yet ready to announce a final site.
- Which entities, besides the cities, will be included in the approval process?
- *Lab Comment:* The Department of Energy and the University of California Regents.

### Update on Capital Construction Projects

Jerry O'Hearn presented an overview of the status of the following planned LBNL capital improvement projects recently proposed or underway:

| Project  | Status  |
|--|---|
| BELLA  | Conventional facilities renovation is complete and the equipment installation has begun and will continue through most of 2012. |
| Bevatron Demolition                              | In final stages of demolition.  |
| Computational Research and Theory facility (CRT) | In construction.  |
| Seismic Phase 2                                  | In construction. Construction and renovation on General Purpose Laboratory (GPL), Building 74 and Building 85 are underway.     |
| Seismic Phase 3                                  | Depending on funding, conceptual design planning may begin as early as fiscal year 2013 (October 2012).                         |
| Solar Energy Research Center (SERC)              | In design.  |
| User Test Bed Facility                           | In final design and expected to go to bid soon.   |

### *CAG Member Questions and Comments*

The following is a summary of CAG member requests and concerns related to Lab capital projects recently proposed or underway:

- In terms of the BELLA demolition, where is the concrete recycled?
- *Lab Comment:* Most of the concrete ends up in landfill, but the metals (such as rebar) are recycled.
- What are lab policies on recycling contaminated materials?

- *Lab Comment:* During the demolition process, materials are tested for radio-isotopes. Those materials found to be radioactive are sent to a disposal facility in Nevada. Those that are not contaminated are recycled or sent to a landfill if recycling is not an option.
- What are the claddings for the new CRT building?
- *Lab Comment:* The building will sit on a concrete stoop which will be exposed at the bottom and have both a painted aluminum metal panel and a glass façade along the sides. The glass façade has been minimized in order to conserve energy.
- Is there a landscaping plan for the CRT site now that the eucalyptus trees have been removed?
- *Lab Comment:* The Lab does have a landscaping plan and CAG members can review this at an upcoming meeting.

### **Report on Bird-Friendly Building Design**

At the November CAG meeting, CAG members requested that the Lab investigate how the design for the CRT building compared to the City of San Francisco's newly passed bird-safe building ordinances. In response to this request, Lab Staff met with their architects and learned that the CRT does in fact generally meet the standards used by San Francisco, including installation of a screen that will cover the glass façade of the CRT so as to alert birds to the structure. As a next step, the Lab will review operational guidelines for bird-safe buildings.

### **Water Usage at CRT Facility**

In response to CAG member questions regarding water usage, the Lab began investigations of on-site groundwater resources for the CRT cooling towers. Initial investigations into water capacity revealed that the on-site hydraugers give off a minimal amount of water and the Shively well produces roughly 15 gallons of water per minute, which is about the equivalent of two water hoses. The Lab will continue to confirm on-site water capacity and investigate water chemistry, as well as pretreatment and distribution systems that may be necessary to re-use on-site water.

### *CAG Member Questions and Comments*

The following is a summary of CAG member requests and concerns related to Lab Water Usage at the future CRT Facility:

- Is the Lab considering use of recycled water for CRT or other purposes?
- *Lab Comment:* The quantity of recyclable water from the Lab is too small to meet the needs of the CRT facility. The Lab has also considered using recycled water for landscaping, but there is very little landscaping on site and most of it does not require irrigation.

### **Update on Potential Cell Phone Tower**

In response to an inquiry at a previous CAG meeting, Richard Gregory reported on the possibility of building a cell phone tower on Lab property. Due to the high elevation of the Lab, a cellphone tower on the hill could potentially broadcast frequency across the bay and be picked up in San

## **LBNL COMMUNITY ADVISORY GROUP (CAG)**

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Francisco. This could be problematic, especially in the case of 911 calls which are located by GPS signals. The next steps include a frequency analysis and report on feasibility from AT&T, which is expected in March 2012. The Lab will report back to the CAG once more information is obtained.

### *CAG Member Questions and Comments*

The following is a summary of CAG member requests and concerns related to a potential cell phone tower on the hill:

- Safety concerns should be considered, especially for hikers and children visiting Tilden Park who may not be able to call for help if there was an accident or natural disaster.
- The Lab is well-positioned to act more expeditiously than some of its neighbors on approving a cell tower.
- Not everywhere has to have cell phone service. For example, much of Yellowstone National Park does not have cell phone service and many people enjoy getting off the grid.
- Mount Diablo has cell phone towers on the peak and could likely have similar issues.
- *Lab Comment:* The towers on Mount Diablo employ older technology which produces weaker signals than newer tower technology. Also, Mount Diablo satellite dishes' downward angle would be hard to replicate on the hill due to topography.
- Would UC land be a better choice?
- *Lab Comment:* The Lab does not yet have enough information to know what site is best. The Lab is working with UC Berkeley throughout the preliminary discussions with cell service providers.
- The Lab should consult local residents before allowing any sort of cell phone tower to be placed on its property.
- Lack of cell phone service can have negative effects on productivity for students and workers in the area.
- The Lab should conduct a user survey on campus to understand the needs of employees in regards to cell phone service.

### **State of the Lab Report**

Lab Director Paul Alivisatos, gave his annual CAG presentation on the State of the Lab. Dr. Alivisatos reviewed successes of the past year, including the Nobel Peace Prize awarded to Lab Physicist Saul Perlmutter in 2011. Dr. Alivisatos also gave an update on the Lab's priorities for the future.

Looking forward, Team Science remains a top priority for the Lab. Developing human capital will be critical to creating an environment where scientists with diverse backgrounds and capabilities can come together to tackle complex issues. The Lab will focus on finding the right team members for science initiatives, as well as creating strong team dynamics, in order to achieve success. The Lab is currently in the process of recruiting a new Manager of Diversity and Inclusion in order to build stronger human capital at the Lab.

## **LBNL COMMUNITY ADVISORY GROUP (CAG)**

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Work on the Carbon Cycle 2.0 Initiative will also continue to be a priority for the Lab. Currently, a major portion of Lab staff works on one of the various large-scale initiatives aimed at creating a sustainable carbon cycle for the future. This work includes science innovation in areas such as combustion, carbon capture and storage, biofuels, and artificial photosynthesis. Other initiatives include energy storage, solar PV and better energy efficiency. This work will continue to address societal needs for energy use in both developed and developing countries.

The Lab will also focus its overall strategy on understanding and addressing important trends that are currently unfolding in science. These trends include the growing importance of biology, particularly in the field of biofuels, as well as the need for more advanced measurement and computational tools. These trends will direct not only the type of science done at the Labs, but also the type of facilities that will be required for the future and the physical location of the various science teams.

Budget issues remain a concern for the Lab. Although currently the Lab's budget has not been cut, the Lab does not expect to receive increased Federal funds in the near future. In order to put funds to best use, the Lab is modernizing its business systems. This includes upgrades to HR recruitment and financial management systems.

### *CAG Member Questions and Comments*

The following is a summary of CAG member questions and concerns related to the future of the Lab:

- Does the Lab's future planning account for the space that will be needed to build potential large-scale microscopes?
- *Lab Comment:* Yes, accommodating potential future instruments and facilities is one important consideration in Second Campus site selection.

### **LBNL Science Education and Outreach to Local Schools Presentation**

Susan Brady, Department Head of the Center for Science and Engineering Education (CSEE), reported on the Education and Workforce Development programs offered by the Lab which focus on strengthening the infrastructure of science education. Established in 1988, the CSEE promotes equal access to careers in the field of science and the quality of science teaching. Program goals include increasing the number of scientist and engineers and promoting scientific literacy.

Teacher education is an important component in ensuring that children receive high quality science education and, for this reason, both teachers and those preparing to be teachers are invited to participate in CSEE programs. These include professional development opportunities such as summer internships at the Lab for both undergraduates and science teachers interested in research being done at the Lab.

Programs for youth comprise a major portion of the CSEE efforts. High school juniors can apply for a summer internship at the Lab during which they conduct research, as well as produce an abstract and poster for presentation. Educational visit programs send Lab staff members out to local schools to work both in classrooms and in afterschool programs. A new program, the "Cool Your School Initiative," sends Lab staff to sixth grade classrooms to teach students about energy

## **LBNL COMMUNITY ADVISORY GROUP (CAG)**

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science through interactive experiments. Currently in trial-testing, this program is expected to launch in June 2012.

Over the past three years, the Lab has conducted science workshops and Lab visits for over 4,500 East Bay grade schools students and provided 89 research internships for local high school students, community college students and science teachers. Looking forward, the CSEE is interested in partnering with more local institutions in an effort to continue to strengthen science education through outreach to teachers and students.

### *CAG Member Questions and Comments:*

The following is a summary of CAG member requests and concerns related to the Science Education and Outreach Program:

- What's our local team science bowl record?
- *Lab Comment:* Albany High School has attended the national competition in recent years, but did not win.
- The Lab should consider where these children live and help them identify toxic elements in their neighborhoods.
- *Lab Comment:* The Lab partners with the Lawrence Hall of Science through the East Bay Academy for Young Scientists (EBAYS) Program; an after-school program focused on working with students to do scientific research on environmental issues in their community
- Once built, the Test Bed Facility could provide an excellent teaching tool for local children.
- The Lab should target specific UC Berkeley graduate school departments to expand potential volunteers in these programs. It could provide experience for the grad school student and more human resources for this volunteer work.
- These programs should have clear goals and be measureable to ensure that the Lab is reaching the right group of children and making the most impact possible. UC could serve as a conduit to gather grant monies to fund this type of evaluation work.
- *Lab Comment:* Currently, funding comes from Workforce Development for Teachers and Scientists (WDTS). The Lab is looking to partner with organizations such as UC to do deeper evaluation and look at issues such as causality in these programs.

### **CAG Year in Review and Future Agenda Topics**

Daniel Iacofano led CAG members in a discussion on the 2011 year in review, as well as future topics that could be addressed in the 2012 CAG meetings. CAG Members identified March 15<sup>th</sup> as the preferred date for the CAG member tour of the Lab. Although this tour will be for CAG members only, members of the public are invited to sign up on the Lab website to attend the monthly public Lab tours. It was also decided that an upcoming CAG meeting would be held at the UC Berkeley Botanical Gardens.

CAG Members also discussed the potential of creating a sub-committee tasked with studying the impacts of the Lab on Berkeley and the greater community. The sub-committee would then present their findings at future CAG meetings and make recommendations on how to improve on the positive impacts of the Lab and mitigate for any negative ones.

## **LBNL COMMUNITY ADVISORY GROUP (CAG)**

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Potential future CAG meeting topics identified included:

- Second Campus
- Contamination – including nanoparticles, water and air quality
- Relationship between the Lab and UC Berkeley – including the cumulative impacts of construction projects
- Economic Impacts of the Lab – including procurement, hiring of temporary and full-time workers
- Seismic Phase III construction
- Water Resources Presentation by CAG Member

### *CAG Member Comments:*

The following is a summary of CAG member requests related to CAG processes:

- The Lab should request information from participants of the monthly public tour, such as where they are from and what they hope to learn by visiting the Lab.
- Once the Second Campus site is selected, the CAG should be expanded or reconstituted to include stakeholders from the area in which the Second Campus will be located. There could also potentially be a sub-committee comprised of residents and business owners from the Second Campus community.
- The Lab should be more transparent around contamination concerns.
- CAG members who feel that the Lab has not presented complete information regarding a particular topic should raise these issues at the meeting and make specific requests for further information.
- It would be useful to hear how nanoparticle contamination issues are handled at UC and LBNL.
- Representatives from regulatory agencies should be invited to attend and present at CAG meetings.

### **Public Comment**

There were no comments from members of the public at this meeting.

### **Next Steps**

The next meeting is March 19, 2012. The CAG will hear more information on the Second Campus selection, and a presentation from the Lab on the Molecular Foundry and nanotechnology. There will also be a CAG member presentation on the history of water resources. All presentations from this and previous meetings are available within the Meeting Calendar section of LBNL CAG website: <http://www.lbnl-cag.org>