## Berkeley EH&S





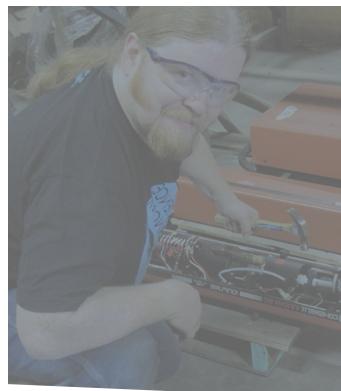


**OEMERGENCY** MANAGEMENT

# Annual Report FY16







### **From the Executive Director**

The 2015-2016 academic year has been an exciting one at UC Berkeley's Office of Environment, Health & Safety (EH&S), and we're proud to present this 2016 annual report highlighting some of our department's key accomplishments.

Once again this year, EH&S staff have worked in very creative ways to address the needs of the campus, identifying risks to the campus community, environment, and operations, and collaboratively developing controls for those risks. Appropriately, some of the solutions we've developed have won national recognition.

As an office, we've remained committed to continuous improvement and innovation in our programs and client services. This report illustrates how we've focused that commitment, working with and for our clients to achieve meaningful results in support of our mission:

We provide guidance and services to the campus community that promote health, safety, environmental stewardship, and emergency management.

I trust you'll find this report impressive and informative. As we continue to evolve our services, we welcome your comments, questions, and suggestions. It's stakeholder input that fuels our creative fires!

Mark Freiberg Executive Director



### National Recognition

### How to Become an Urban Survivalist

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The Office of Emergency Management (OEM) launched the *How to Become an Urban Survivalist* campaign, aiming to break free from traditional emergency messaging. In August 2015, OEM redesigned their website to focus on the audience's interests and needs. Utilizing pop culture, humor, and engaging graphics, OEM connected with Berkeley students and renewed their enthusiasm and curiosity in emergency preparedness. The campaign also included an initiative to provide every residential student a starter "go bag." To maintain momentum, OEM partnered with residence hall staff to host a disaster movie night, keeping interest in the urban survivalist campaign high.



National Association of Government Communicators



2016 Blue Pencil & Gold Screen First Place Award - Website Campus Safety, Health and Environmental Management Association



Marketing Campaign Award of Excellence



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### National Recognition

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### Excellence in Laboratory Safety Awards

Last year, EH&S launched the Excellence in Laboratory Safety Awards. The purpose of the awards program is to reward researchers who demonstrate extraordinary leadership in laboratory safety. In November 2015, EH&S awarded the grand prize to the Irfan Siddigi Lab (Physics) for their self-directed approach to creating safe procedures and inventories of nano-scale materials. The Siddigi lab was selected from an entry pool of over 400 labs and seven other finalists. For the second year of this program, EH&S is expanding the entry pool to include core facilities. Winners will be announced in January 2017.

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Campus Safety, Health and Environmental Mgmt. Assn.



Marketing Campaign Award of Distinction

### **Working Together**

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- MERGE

#### **Crisis Management Team Earthquake Exercise**

In December 2015, the Office of Emergency Management (OEM) brought together campus leaders to practice their response during a simulated emergency. The Crisis Management Team (CMT) serves as the policy level decision-making body during emergencies and is co-chaired by the Vice Chancellor-Administration & Finance and the Executive Vice Chancellor & Provost. The December exercise provided an opportunity for the CMT to discuss and make decisions on key emergency policy level questions, develop and approve a communications strategy, and identify the pertinent information, people, and resources needed for recovery policy decisions. Harvard Professor Dutch Leonard, an expert in crisis leadership, was the lead facilitator for the exercise.

This exercise was the first designed exclusively for the Berkeley Crisis Management Team.

### Working Together

#### Lab Cleanout

Last year EH&S managed a waste cleanout of a retiring professor's Wellman Hall laboratory. With research focused on pesticide chemistry and toxicology, the laboratory housed a variety of hazardous materials, including pyrophorics, radioactive materials, as well as flammable and reactive materials. EH&S oversaw the clearing of over 6,000 square feet of lab and storage space. The cleanout required coordination between the lab and personnel from the EH&S radiation safety, fire prevention, biosafety, and hazardous materials teams, campus strategic academic and facilities planning, the department of Environmental Science, Policy, and Management, and outside vendors.

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### Before



#### The cleanout removed:

7,000+ toxic, flammable, and radioactive materials
152 drums of hazardous materials
14 pyrophoric materials
5 potentially explosive materials
5 refrigerators requiring decontamination

### After



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### Working Together

### **Online Event Permits**

In collaboration with the UC Berkeley Police Department (UCPD), EH&S launched the online event permit web application in February 2016. The new system streamlines five paper permits into one online process. Prior to the launch, a student, faculty or staff member would need to visit different offices and/or websites to secure the required permits for their event. Benefits of this new system include better tracking of issued permits, improved notification procedures, and a reduction of time and effort on the part of our clients and our staff. This type of collaborative work ultimately makes campus safety more accessible and attainable for our clients. Annual Report FY16

From February to June 2016, EH&S and UCPD issued 421 event permits.



### **Creating Partnerships**

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#### **Radiological Security Partnership**

In June 2015, the Department of Energy Radiological Security Partnership awarded UC Berkeley a grant to provide security enhancements for some of its highest hazard radioactive sources, as well as upgrades to the UCPD dispatch center. Additional future funds will provide training to security staff and local emergency responders. Execution of the grant required careful coordination between EH&S, UCPD, Construction & Design, and designated building managers, along with local departmental coordination through the responsible principal investigators.

# Berkeley received a **\$250,000** grant through this Radiological Security Partnership.

### **Creating Partnerships**

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### **KIDS for the BAY**

As part of the Chancellor's Community Partnership Fund, EH&S collaborated with the College of Natural Resources (CNR) and KIDS for the BAY to support the Strawberry Creek restoration program. Through this partnership, local third to fifth grade students use the Berkeley campus and Strawberry Creek as an outdoor laboratory. In their classrooms the students learn about watershed science in advance of field trips to Strawberry Creek. In partnership with EH&S and CNR students, the grade schoolers learn about the local flora and water quality, and participate in hands-on projects such as planting and nurturing native plants.

73 local students participated in this partnership last year.

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### **Creating Partnerships**

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#### **Supporting New Construction**

Over a period of two months last fall, the EH&S Fire Prevention Division (FPD) oversaw the completion and opening of the new home of the Berkeley Art Museum and Pacific Film Archive, and the redesigned Lower Sproul complex. In addition, FPD managed the plan review and construction inspections of the new Jacobs Hall. This new building sits adjacent to Etcheverry Hall, a non-sprinklered building. As a condition of approval of Jacobs, FPD obtained a commitment from the campus to install automatic sprinklers in Etcheverry to ensure safety in the new building and adjacent structures. This type of forwardthinking exemplifies the approach FPD uses in their efforts to make the campus safer.

Jacobs Hall provides state-of-the-art studios and labs for the Jacobs Institute for Design Innovation.

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### Sharing Knowledge

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### Silobusters!

Over this past fall and winter, the EH&S Silobusters! team led a cross-training series for EH&S staff who interact with campus laboratory researchers and faculty. This cross-training series was developed to give our staff a better understanding of each other's programs and to share information that allows them to confidently identify overt issues in other program areas. The Silobusters! team also developed an inspector resource sheet including a selection of easy-to-spot, commonly-noted safety issues from each program area. Providing this type of cross-training ensures EH&S staff are armed with information that allows them to identify hazards on campus firsthand.



Silobusters! is being used as a model to develop the systemwide EH&S Professional Development Institute. Berkeley EH&S

### Sharing Knowledge



### Biosafety and Biosecurity Improvements

Over the past year, EH&S worked with campus partners to tighten controls on high-containment labs where biohazardous agents are used. This work brings together a cross-functional group to enhance the operations, maintenance, and planning of existing and proposed high-containment labs. These improvements included upgrading facilities, establishing a new High Containment Lab Oversight Group, and bringing on a new high-containment lab director within the EH&S Biosafety program. By improving our biosafety and biosecurity procedures, EH&S and its campus partners have demonstrated a firm commitment to supporting ground-breaking biohazardous materials research with minimal risk to our researchers, staff, the public, and the environment.

UC Berkeley is one of seven UC campuses with a high containment lab. Berkeley EH&S

### Sharing Knowledge

### **Creeks of UC Berkeley**

The EH&S environmental protection team launched the new Creeks of UC Berkeley website in June 2016. The website fulfills the community outreach requirements of the Berkeley storm water permit issued by the California State Water Resources Control Board, and addresses all urban creeks at Berkeley: Strawberry Creek, Meeker Slough, Codornices Creek, Village Creek, and Derby Creek. The creeks website is intended for a broad audience, providing education and information about each of these creeks, including what to do if you witness a threatening spill. In addition, it houses a database on Berkeley creeks and urban creek science for the scientific community.

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Visit the Creeks of UC Berkeley website at creeks.berkeley.edu

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### **Training Accomplishments**

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#### **Increasing Access**

EH&S streamlined the radiation and laser use authorization process by changing the required training from instructorled to online e-courses. These courses make the trainings more accessible to researchers, and prevent delays in starting laboratory work.

#### **Building Partnerships**

In collaboration with residential and student service programs, the EH&S FPD and training units developed an online fire and life safety training course for student residents. To facilitate student access to the training, EH&S partnered with educational technology services to host the course on bCourses. This course is now available to all UC campuses.

### **Reaching New Clients**

EH&S's new Wilderness First Aid Training for field researchers makes researchers more aware of important safety measures before embarking on field research trips.

### Improving Compliance

Using imagery to enhance learning, EH&S trainers developed a series of infographics to support in-person training provided to trades and custodial staff on bloodborne pathogens, hazard communication, injury and illness prevention, and ladder safety.

#### **Sharing Knowledge**

Over the last year, EH&S staff worked closely with UC colleagues to modify Berkeley trainings for systemwide use. These included the laboratory safety refresher, controlled substances, and bloodborne pathogens trainings.



### **EH&S** By the Numbers

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**192,165** Pounds of waste processed through the campus hazardous materials facility. This represents a total of 22,694 items.

98% of laboratory population compliant with laboratory fundamentals training

**36** individual regulatory agency inspections

#### 1,719 total EH&S lab inspections.

686 laser use authorization inspections
468 inspections of radioactive materials and radiation producing machines
413 general lab safety inspections
152 biosafety inspections

#### 3,283 lab coats distributed

**62** fire drills

401 fire & life safety building inspections



