

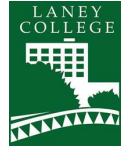
## BEST Center Annual Institute

### Learning by Doing in Building Technician Education: New Technologies, Teaching Strategies, and Lab Applications

January 11 - 14, 2017 | AGENDA

#### Wednesday, January 11 – Oakland

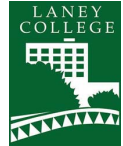
- 6:45 am Hotel breakfast
- 7:30-7:45 Shuttles to Laney every 15 minutes
- 7:45-8:30 Check-in at the Bistro, Laney College
- 8:45 **Welcome and Introduction of Participants** – Pamela Wallace, BEST Center Director
- 9:15 **Overview of BEST Center and Institute Objectives** – Peter Crabtree, BEST Center Principal Investigator & Dean, CTE, Laney College
- 9:35 **Preview of Institute Agenda** – Larry Chang, BEST Center Manager
- 9:45 **High Performance Building Operations Professional Certification: Progress Update** – Peter Crabtree & Ted Wilinski, BEST Co-PI
- 10:15 **Association of Controls Professionals Certification: Update** – Brian Lovell, BEST Co-PI
- 10:30 Break
- 10:45 **Discussion of Student Recruitment and Marketing Strategies** – Larry Chang; Robert Nirenberg, Metropolitan Community College; All
- 12:00 pm Lunch/networking
- 12:30 **Virtual Lab Tour Video 1** - Lane Community College
- 1:00 **Application for NSF Advanced Technological Education (ATE) Project grants** – Peter Crabtree; Deb Hall, Valencia College; Alison Pugh, South Seattle College
- 2:00 **Small Group Discussions: BEST Center Impacts on Programs and Student Learning Outcomes**
- 3:00 Break: **Virtual Lab Tour Video 2** - Georgia Piedmont Technical College



- 3:15           **BAS Lab Trainers Overview** (Room A-191) - Brian Lovell & Chuck Frost, BEST Co-PIs
- 5:30           **Introduction to Data Logger Exercise** – Ted Wilinski & Chuck Frost
- 6:30           Networking dinner at Bistro
- 7:00           **Virtual Lab Tour Video 3** – Sacramento City College
- 7:30           Adjourn, shuttle to hotel

## Thursday, January 12 – Oakland & San Francisco

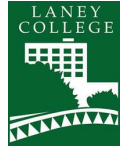
- 7:30 am       Hotel breakfast
- 8:00-8:15     Shuttles to Laney every 15 minutes
- 8:30           Preview of Day 2 agenda and logistics (Laney College, Room A-191) – Victor Garcia, BEST Center Coordinator
- 8:45           **BAS Lab Exercise** - Brian Lovell & helpers
- 12:00 pm     Lunch/networking at Bistro
- 12:30         **Virtual Lab Tour Video 4** – College of DuPage
- 1:00           **Industry Panel: Tools & Processes for Improved Building Operations**  
Introduction by Chuck Frost; Paul Ehrlich, Research Scientist, Pacific Northwest National Laboratory, Michelle Daniels, Property Manager, US General Services Administration; and Jay Santos, Principal, Facility Dynamics Engineering
- 2:45           Depart to San Francisco via BART (Lake Merritt Station to Embarcadero Station)
- 3:30           **Arrive at DPR Construction, Inc., Zero Net Energy Building, San Francisco**
- 3:45           **Tour of DPR Construction Regional Office**
- 4:30           **Managing a Zero Net Energy Building** – Edmundo Martinez, Facilities Manager, DPR
- 5:00           **ZNE Controls Integration Strategy for DPR Building** – Janey Kaster, Manager, Honeywell International, Inc.
- 5:45           Catered dinner at DPR
- 6:30           **Zero Net Energy (ZNE) Buildings: a Primer** – Edward Dean, Architect & Author of *Zero Net Energy: Case Study Buildings, Vols. I & II*; Can Anbarlilar, Project Manager, PG&E



7:30 Adjourn, return via BART to Lake Merritt Station, pick-up by hotel shuttle

## Friday, January 13 – Berkeley

- 6:45 am Hotel breakfast
- 7:45 Shuttles leave from Hotel to Lawrence Berkeley National Lab (LBNL)  
1 Cyclotron Road MS 90R3111, Berkeley, CA. 94720
- 8:30 **Arrival at FLEXLAB to install data loggers**; proceed afterwards to Wang Hall
- 9:00 **Welcome to LBNL and Overview of Presentations and Activities of the Day** –  
Mary Ann Piette, Director of LBNL Building Technology & Urban Systems (BTUS) Division
- 9:15 **Commercial Building Energy Saver (CBES)** - Tianzhen Hong, BTUS; Kaiyu Sun, BTUS;  
Mary Ann Piette
- 10:15 **CBES Exercise** - Form workgroups to analyze various retrofit options
- 11:15 Break
- 11:30 **CBES Exercise: Report Out**
- 12:00 pm Lunch/networking
- 12:30 **U.S. Appliance Efficiency Standards** – Alison Williams, Energy Efficiency Standards Group, LBNL
- 1:00 **Using the Cloud to Manage Energy-Related Services in Buildings** - Alan Meier, Electronics  
Lighting & Networks Group, LBNL & Energy Efficiency Center, UC Davis
- 2:00 **Data Analysis: Introduction to Graphical Interpretation of Building Data** – Ted Wilinski &  
Chuck Frost
- 2:30 Break
- 2:45 **Data Analysis Exercise** (based on data collected at FLEXLAB) - Form workgroups to download  
data, analyze, and formulate conclusions
- 4:30 **Data Analysis Exercise: Report Out & Discussion**
- 5:15 Shuttle from Wang Hall to UC Berkeley Faculty Club, 1 Faculty Club, Berkeley, CA. 94720
- 5:30 Networking dinner - UC Berkeley Faculty Club



6:00 **Evening Talk: Extreme Weather Conditions in the Face of Climate Change –**  
Michael Wehner, Sr. Staff Scientist, Computational Research Division, LBNL

7:00 Adjourn, LBNL shuttle to hotel

## Saturday, January 14 – Oakland

6:30am Hotel breakfast

8:15 Shuttle from hotel to Laney College

8:30 Preview of Day 4 - Larry Chang

9:00 **Action Plan Presentations by Faculty**

12:00pm Lunch & Action Plan Presentations continue

1:00 Wrap-up discussion

1:15 Evaluations

2:00 Adjourn and depart

