

National Science Foundation
 Alexander Schwarzkopf Prize
 “for exemplary research
 contribution to technology
 innovation and its positive
 impact on industry and the
 society as a whole”.



Center for Building Performance & Diagnostics (CBPD)

Research and graduate education focused on innovations in high performance buildings and infrastructures, building performance simulation, building data analytics, policy and economics, and indoor environmental quality for improving a shared quality of life and a sustainable future.

MS & PhD in Building Performance & Diagnostics

10 Faculty + Visiting Scholars

25 students 2021

Over 300 MS & PhD since 1980 + DDEs

Oldest PhD in Building Science in the U.S.

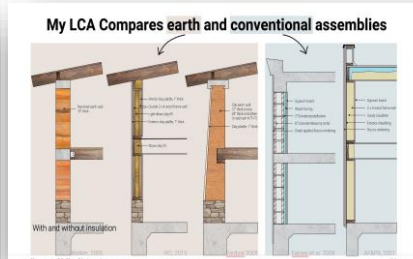
- 1. Guidelines and Design Innovations** for High Performance Buildings & Communities
- 2. Indoor Environmental Quality** for Human Health & Productivity (with POE+M)
- Innovations in **Building Controls** (with Testbeds) - Humans and Nature in the Loop
- Advances in **Simulation** for High Performance Buildings and Sustainable Cities
- Building and Urban **Data Analytics** for Advancing a Sustainable Built Environment
- 6. Policies and Economics** for Advancing High Performance Buildings & Communities



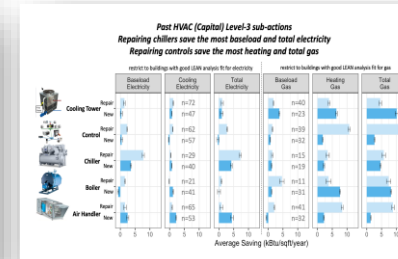
Toolkit for **Urban Regenerative Environments** Katrini 2016
 (Creating the Everyday Commons, Katrini 2019)



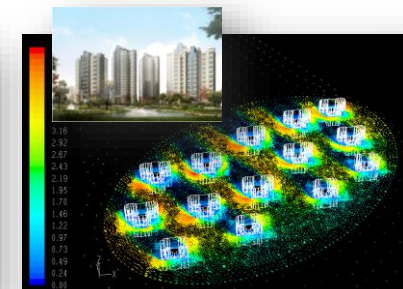
Persistent Workplace Plug-load Energy Savings and Awareness through **Intelligent Dashboards** Yun 2014



Earthen Building: Perception, **Environmental LCA**, and Policy Analysis Ben Alon 2020



Machine Learning to **Target Energy Retrofits for Commercial Buildings** under Alternative Climate Change Scenarios Xu 2020



Advanced Building Thermal Simulation Coupling of Finite Volume Method and Nodal System Zhang 2011



Purposeful Play: **Serious, Pervasive, Energy Games** Bridge the Energy-Efficiency Gap, Srivastava 2020