







### **Science Areas**



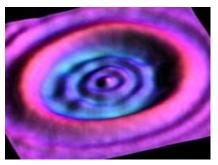
**Biosciences** 

- Microbes to Biomes
- Imaging
- Agriculture
- Human Health
- Biomass Processing
- Microbial Conversion
- Industrial Biotechnology



**Energy Technologies** 

- Energy Storage
- Energy Efficiency
- Environmental Technologies
- Grid Analysis and Control



**Energy Sciences** 

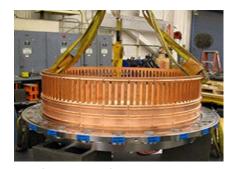
- Energy Generation
- Coordination Chemistry
- Spectroscopy
- Semiconductors and Photonics







### **Science Areas**



**Physical Sciences** 

- Ion, Proton and Laser
   Plasma Accelerators
- Neutron Generators
- Scintillators
- Magnets
- Support software



**Computing Sciences** 

- Computer Architecture
- Cyber Security
- Big Data Management and Analytics
- Artificial Intelligence
- Machine Learning
- Network Infrastructure



**Earth & Environ. Sciences** 

- Subsurface Simulation
- Surface/Climate Simulation
- Subsurface Characterization







## **National User Facilities**



Advanced Light Source

### 2,200(ALS)s

- Pharmaceuticals
- Semiconductors
- battery components
- Other unique uses



Molecular Foundry (MF)

#### **700** users

- NS design
- NS fabrication,
- Soft materials synthesis
- Adv. e-beam characterization



Joint Genome 1,400 users

- DNA synthesis
- Sequencing projects
- Fuels from biomass
- Drought-resistant plants







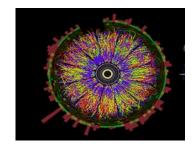
## **National User Facilities**



**NERSC** 



- Advanced materials
- Physical and life sciences
- Manufacturing
- Climate modeling



**ESnet** 

#### 58 users

- High bandwidth networking
- Large collaborative projects
- Energy
- Origins of the universe







## **Technology Access Centers**





Advanced Biofuels
Process Demonstration Unit
(ABPDU)





















## **DOE Labs & Industry Engagement**

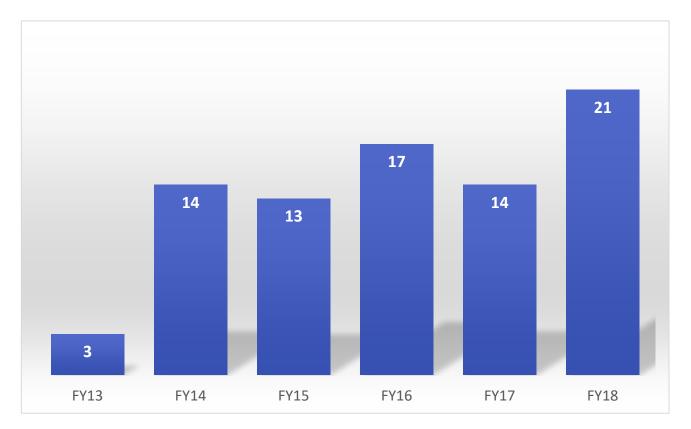
- Strategic Partnership Projects (SPP)
- Technology Assistance Programs\*
- Collaborative Research & Development Agreement (CRADA)
- Agreements for Commercializing Technology (ACT)\*
- User Facility Agreement
  - Non-Proprietary
  - Proprietary







# SBIR/STTR Awardees working with Berkeley Lab

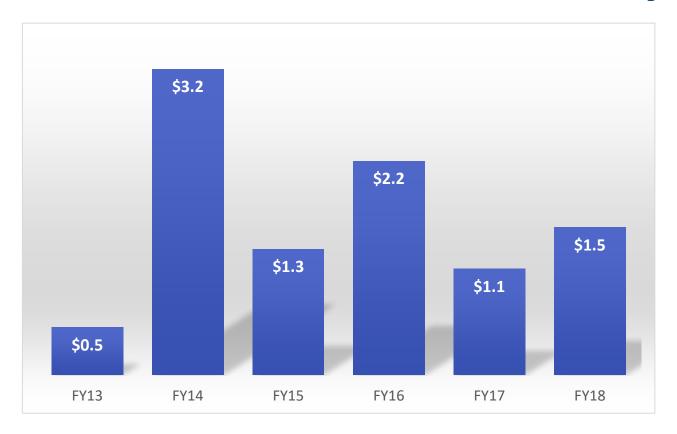








# SBIR/STTR Funds provided to Berkeley Lab

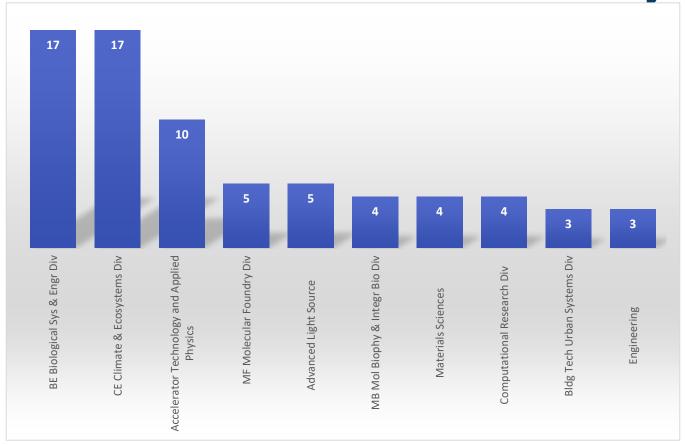








# Science Areas with > 2 Awards at Berkeley Lab









**Thank You**