

Awareness Interest & Access

April 26, 2022

Lawrence Berkeley National Lab Opportunities

1:05 pm - 1:40 pm

Education Opportunities

Kelly Johnson, Talent Outreach Program Manager

Colette Flood, Lab Education Director

Business Opportunities

Phillip McCants, Small Business Liaison Officer, Office of the Chief Financial Officer

Gail Chen, Partnerships and Proposals Program Manager, Strategic Partnerships Office

Shanshan Li, Principal Technology Commercialization Associate, Intellectual Property Office – Lab Directorate

Breakout Rooms

- Small Business Program and Subcontracting Opportunities
- Partnership Accessing Intellectual Property
- Internship Programs
- Job Opps: Students, Postdocs, Fellows, Professionals, Entrepreneurial Scientists

1:40 pm - 2:25 pm





AWARENESS, INTEREST & ACCESS:

National Laboratories 2022 Spring Session

April 26, 2022

cyclotronroad

Activate

BERKELEY LAB BRINGING SCIENCE SOLUTIONS TO THE WORLD



AGENDA

- Job Opportunities
- Resources for Prospective Employees
- Early Career Scientist & Postdocs
- Activate Entrepreneurial Fellowship

SEARCH JOB OPPORTUNITIES

jobs.lbl.gov













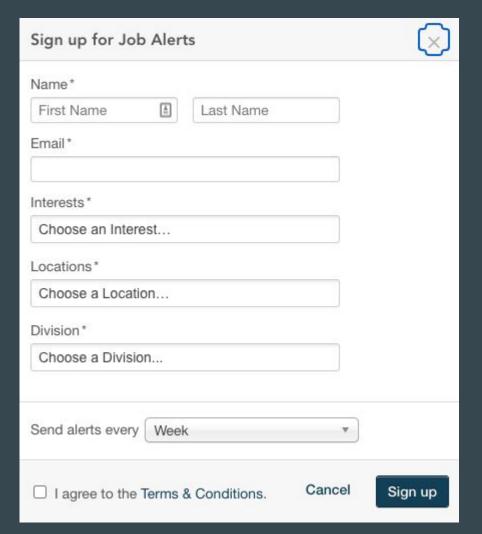






RESOURCES FOR PROSPECTIVE EMPLOYEES

- FAQs for Prospective Employees
- Culture
- Benefits
- Outreach Events <u>Calendar</u>



RECRUITMENT PROCESS

Submit Application

Initial Screening

Interview

Reference Checks

Job Offer

- Apply directly to a position at https://jobs.lbl.gov/
- The Recruiter or the Hiring Manager will conduct a review and assessment of applicants that meet the basic requirements of the job. This can be done using a supplemental questionnaire or a phone/video interview
- The interview and evaluation is a formalized and structured processes.
- Top candidate or finalist will receive a request to proceed with conducting professional reference checks
- Once the offer details are determined, the finalist is provided with a verbal offer

EARLY CAREER SCIENTISTS & POSTDOCS

- Career Pathways Office
- <u>Early Career Enrichment</u>
 <u>Program (ECEP)</u>
- Scientist & Engineer Appointments
- Postdoc Resources
 - Postdoc Training Grant
 - Seminars and Workshops
- Research SLAM



Activate

Cyclotron Road + Activate Entrepreneurial Fellowship

Awareness, Interest, and Access with Lawrence Berkeley National Laboratory Brenna Teigler Tuesday April 26, 2022

Born from the U.S. National Labs

Founded in 2015, Activate partners with U.S.-based funders and research institutions to support our fellows. Activate's entrepreneurial fellowship model originated at Cyclotron Road, a division of Lawrence Berkeley National Laboratory and founding Activate partner.

Stage 1

2015: The Experiment

With Cyclotron Road (a division of LBL), we identified a gap in the science-to-market ecosystem and launched an experiment with a new model of innovation.

Stage 2

2019: Proving the Fellowship

Four cohorts later, we began to scale, launching Activate Boston and proving out that fellowships for scientists on a mission can work outside our first community.

Stage 3

2021: Expanding our Reach

With the fellowship model proven, we're now supporting fellows across the country and developing additional ways to support our fellows.

cyclotronroad



Activate

Time & Funding

A Two-Year Fellowship

- Fellows turn research into a first product and secure financing
- \$80K-\$110K/yr stipend, plus travel allowance, health insurance
- \$100K in R&D funds

An Expert Community

Advisers, Partners, and Champions

- Fellowship team and managing directors
- An unparalleled network of scientists, engineers, technologists, and entrepreneurs
- A vibrant fellow community

World-Class Tools for Scientists

World-Class Research Labs

- Hard-to-access facilities
- Work with experts and facilities while retaining IP rights

Entrepreneurial Education

- Regular guests
- Custom-built curriculum
- Intensive mentorship, workshops, virtual classes, and professional development services

Early September - October 31

- Cohort 2023 Application Period
- Applicants submit requested information and documents through a personal portal

November - December

- Internal Application Review
- Eligibility screen and full application review, including input from external subject-matter experts

January - February

- Applicant Notification
- Phone Interviews
- Finalist Week Preparation
- Applicant Finalist Event

March - April

Cohort 2023 Selection Finalized

June 1

- Fellowship Begins!
- Cohort 2023 fellow retreat and Activate Summit

To be eligible, you...

- Must have a bachelor's degree and 4+ years post-baccalaureate scientific research, engineering, or technology development experience.
- Must propose a project that is relevant to our target industries and is based in the physical or biological sciences, or related engineering disciplines.
- Must not have raised more than \$2,000,000 in debt or equity funding from non-governmental sources for the proposed project and/or project cannot be commercially ready for full-scale product sales before the application deadline.
- Must be able to work in the U.S., and be able to access a qualified host laboratory like Berkeley Lab!

We are focusing our efforts in three areas where we believe our work will have the most impact.



Climate Change the defining scientific challenge of our time



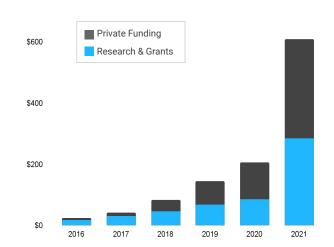
U.S. Innovation Ecosystem the world's best environment for science entrepreneurship



Diversity, Equity, Inclusionthe greatest opportunity to
empower scientists and engineers

The Activate Fellowship works.

Since 2015 our **103 Activate Fellows** have created **74 science-based companies**, some of which will go on to change the world.



Activate Fellows Cumulative Follow-on Funding (\$M)

^{\$}610м

In follow-on funding

\$3.6M average follow-on-funding cohort companies raised during fellowship

17.9x leverage on every dollar spent to support the fellowships

>600 new jobs created in the U.S. by Activate Fellows





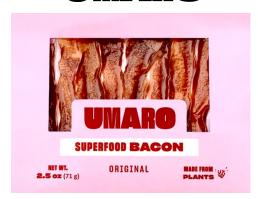




First Products and Milestones

To date, more than half of all companies started by Activate Fellows have reached a first product. These early proof-of-market milestones signal the shift to a maturing product-driven company.

UMARO



AGRICULTURE: Delicious, crunchy, meaty bacon made with protein from ocean-farmed red seaweed, the world's most sustainable protein source.

*GRADIENT



BUILDINGS: Gradient's commercial-grade heat pump technology is 50 percent more efficient than traditional window AC units and uses a low-GHG refrigerant.





CHEMICALS: Mallinda has developed a closed-loop system for the recovery and reuse of carbon fiber composites.



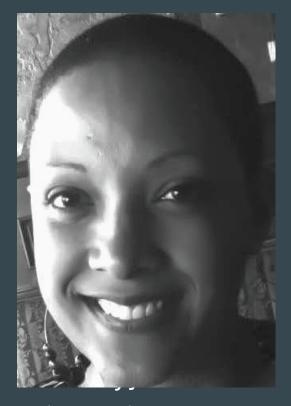
Learn more by visiting....

https://cyclotronroad.lbl.gov/ and activate.org

Activate

For scientists on a mission.





Talent Outreach Program Manager Lawrence Berkeley National Laboratory



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@BerkeleyLabJobs



@BerkeleyLabJobs

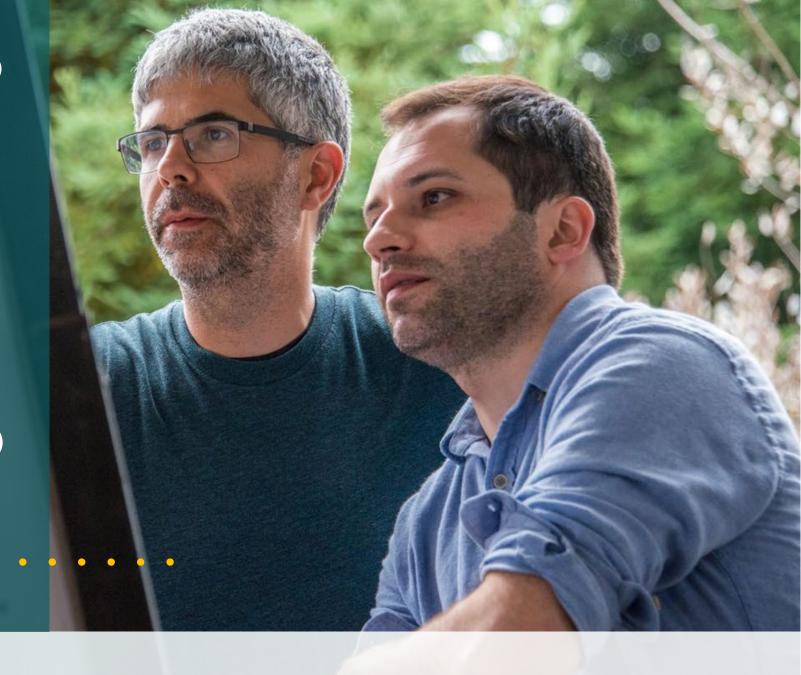






Some recent internship projects include:

- Studying what happens to rainwater in your neighborhood (geoscience)
- Learning how to create better sunscreens (biology)
- Building faster internet connections (computer science)



CCI and SULI:

The Community College
Internship program (CCI)
and Science
Undergraduate
Laboratory Internship
(SULI) support interns by
providing 10-16-week
internships.



Internships are full-time. You cannot take classes while participating in your program. Workforce Development

Eligibility guidelines for interns:

- Must be 18 years or older and have a 3.0 GPA at the time the internship begins.
- Must be a United States
 Citizen or Lawful Permanent
 Resident at the time of applying.

VFP:

The Visiting Faculty Program (VFP) supports current faculty members through scientific research collaborations with U.S. Department of Energy (DOE) laboratory scientists.

Applying faculty members may invite up to two undergraduates or graduate students. Applications are solicited annually for the summer term (May through August).





Eligibility guidelines for VFP interns:

- Must be a United States Citizen or Lawful Permanent Resident at the time of applying.
- Must be a full-time faculty member.



State-of-the-art facilities, dedicated scientists, and you.

Every intern is a valued member of the research team. #teamscience







How do you apply for an internship?

Visit education.lbl.gov/internships to learn more about programs

Learn more about Berkeley Lab's research Reach out to a team that excites you

Key dates for WD&E programs:

- Fall applications are open from March 16 until May 22, 2022
- Fall internships run from August 22 until December 2, 2022





Interested in learning more about internship opportunities at Berkeley Lab?

Contact:

Nakeiah Harrell, Internship Program Manager, nharrell@lbl.gov



Learn more about internships at Berkeley Lab!



Connect with STEM's next

K-12

- K-5 Excite
- 6–8 Explore
- 9–12 Experience
- K–12 Teachers

WD&E

- Undergraduate
- Postbaccalaureate
- Graduate
- Faculty

Career Pathways

- Postdocs
- Early Career
- Scientist & Engineer Appointments

VISITS/TOURS

- In-classroom talks and demonstrations by scientists (<u>Let's Talk About STEM</u>)
- Visits and workshops for local STEM educators (Teacher Externship Week)
- · Field trips to Berkeley Lab

Customized Visits (BLEND)

- · Research conference exhibitions
- · Research poster presentations
- · STEM professionals speaker panels
- · STEM event networking

 Virtual conference and panels (Postdoc Career Fair)

INTERNSHIPS/MENTORING/FELLOWSHIPS

- Introductory skill-building apprenticeships (<u>BLDAP</u>)
- Advanced project-based internships (EinR) for high school students
- Undergraduate and Postbaccalaureate internships (<u>BLUFF</u>, <u>BLUM</u>, <u>CCI</u>, <u>SULI</u>, <u>VFP</u>)
- Graduate internships (GEM, MLEF, SCGSR)
- Faculty internships (VFP)

- Research mentorship/fellowship (Bridge Fellowship program)
- Professional career coaching (Postdoc Program)

VIRTUAL/IN-PERSON PROGRAMS

- Virtual lessons and acitivites for elementary (<u>After School Science</u> <u>Hour</u>) and middle/high school (<u>Live Science</u>)
- Supporting and hosting local STEM events with activities and speakers
- Camps over the summer (<u>SAGE</u>) and spring (<u>SeA</u>)

Customized Visits (BLEND)

- · STEM Career Path panels
- · Technical talks
- · Scientific speaker panels
- · Roundtable discussions

- Virtual/In-person workshops, guest speakers, writing/resume clinics, career booths (Postdoc Career Fair)
- Alumni networking and collaborations (Postdoc Alumni Network)



generation





Small Business Program & Business Opportunities

Phillip McCants

Small Business Liaison Officer

Lawrence Berkeley National Laboratory

April, 2022



Mission

To support the growth and development of small businesses

Vision

To be a role model in creating small and minority business success stories

Philosophy

Small Business First





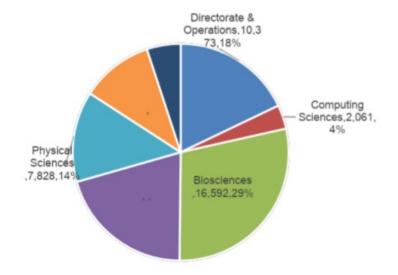
Small Business Set-Asides & Non-Competitive Awards

- Subcontracts up to \$150K set-aside or sole-sourced to small business
- Construction subcontracts up to \$3M set-aside or solesourced to small business
- Subcontracts exceeding \$150K set-aside using rule of 2
- HUBZone, 8(a), SDV set-aside or sole sourced \$4m/\$3.5m

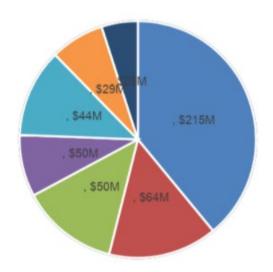


Most Recent Complete Year

FY21 Volume by Area (Total – 53,097



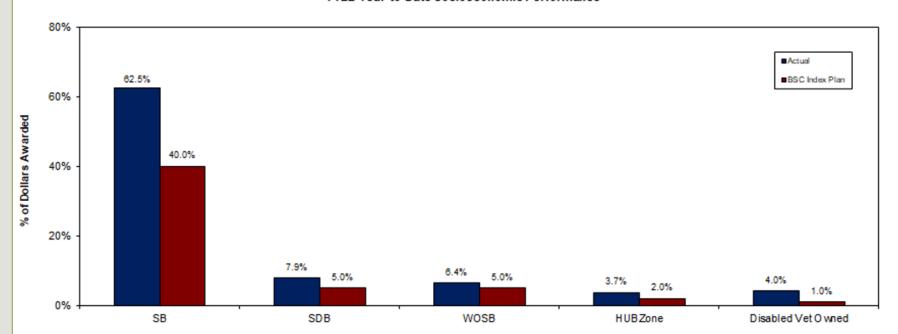
FY21 Spend by Area (Total \$477M)





Socioeconomics Thru March 22







LBNL Small Business Office

Phillip McCants

Small Business Liaison Officer

Lawrence Berkeley National Laboratory

pmccants@lbl.gov

510-486-4595





Becoming An LBNL Supplier

System Award Management (SAM) Registration

https://sam.gov/content/home

LBNL Supplier Registry

https://procurement.lbl.gov/welcome-to-procurementproperty/small-business-program/for-small-business-suppliers/

Must Be Eligible for Federal Awards





Potential Subcontracting Opportunities

Line \$	Description of the \$ Acquisition	Acqusition Type	\$	Acqusition \$	Estimated \$Value	Estimated Fiscal Year & Quarter of RFP Release
1	Small Business Partner for eBuy/eCommerce Industrial and Scientific Catalogs.	Services		Master Agreement	>\$10 million	FY2022 Quarter 3
2	Food Truck Services	Services		Subcontract	\$1 to 3 million	FY2022 Quarter 3
3	Environmental Support Services	Services		Master Agreement(s)	\$5 to 9 million in total	FY2022 Quarter 3
4	Tree Trimming Services	Services		Master Agreement	\$1 to 2 million	FY2022 Quarter 3
5	Back-up child and adult dependent	Services		Subcontract	\$1 to 3 million	FY2022 Quarter 3



General Provisions (Subcontract Terms)

General Provisions

Click on a subject area for General Provisions specific to that area.

The General Provisions are applicable to solicitations and awards for the indicated types of procurements. To view an earlier version of the General Provisions, click here or contact the Berkeley Lab Procurement Specialist.

- General Provisions for Architect-Engineer Services
- General Provisions for Commercial Supplies and Services
- General Provisions for Commercial Supplies and Services (Foreign)
- General Provisions for Consultant Services
- General Provisions for Equipment Lease
- General Provisions for Fixed Price Non-Commercial Supplies & Services
- General Provisions for Fixed Price Construction
- General Provisions for Cost Reimbursable Subcontracts
- General Provisions for Cost Reimbursable (No Fee) Subcontracts (with Educational Institutions and Nonprofit Organizations)
- General Provisions for Standard Research Subcontracts
- General Provisions for Time & Material Subcontracts



Open Forum









Partnership Mechanisms: Providing an overview of the partnership mechanisms to access National Lab Resources

Strategic Partnerships Office Gail Chen

How to Partner with a National Laboratory

Activities



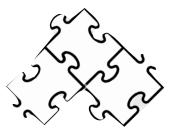
Ideation, teaming, (virtual) Lab tours, project scoping, joint proposal drafting



Testing samples, validate research, and/or sharing technical information



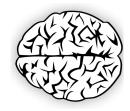
Access to User Facilities (in person or remote)



Technical support & access to equipment/experts/teams, co-develop technology



Access to Federal and State funding, additional partners



Commercialize Lab intellectual property, create startup



Embed employee at Lab, join startup incubator

Mechanisms

- Informal discussion
- Non-Disclosure Agreement (NDA)
- Memorandum of Understanding (MOU)
- Material Transfer Agreement (MTA)
- NDA or Data Use Agreement (DUA)
- User Agreements
 - Non-proprietary (no-cost, merit review, publish results)
- Proprietary (cost recovery)
- Sponsored research agreements
- Technical assistance agreements
- Joint grant proposals to SBIR/ STTR, Tech Commercialization Fund, & larger programs
 - o DOE, CEC, DOD, DARPA, NSF, etc.
- Licenses
- Lab Affiliate Programs,
- Cyclotron Road @ Berkeley Lab

How to Partner with a National Laboratory

Resources and Contacts



- Berkeley Lab <u>www.lbl.gov</u>
- Strategic Partnerships Office <u>spo.lbl.gov</u>
- External Partner Interest Form | Strategic Partnerships Office (lbl.gov)
- Contact Us: spo@lbl.gov
- Cyclotron Road cyclotronroad.lbl.gov



- DOE OTT Lab Partnering Service (LPS) <u>labpartnering.org</u>
- LINC Bay Area Labs https://www.bayarealabs.org/

Tech Maturation Funding Opportunities and Access to LBNL Intellectual Property

Shanshan Li
Principal Tech Commercialization Associate
Intellectual Property Office
Lawrence Berkeley National Laboratory
April 26, 2022





Opportunities for Commercializing DOE Funded IP

Tech Commercialization Fund (TCF)

- FY22 TCF FOAs issued by DOE Program Offices (FECM and VTO already released)
- Application submission via National Lab employee only
- 50% (in-kind or cash) cost share required from a non-federal source
- Funding amount per selection:
 - Topic 1 Projects: \$100K \$250K; 6-18 months performance period
 - Topic 2 Projects: \$250K \$1.5M; 12-36 months performance period

Small Business Innovation Research and Small Business Technology Transfer Opportunities (SBIR/STTR TTOs)

- FY2019 total DOE program budget including ARPA-E was over \$300M
- TTOs are subtopics under the SBIR/STTR topics released in July and November each year
- Applicant has to be a small business and be willing to work on National Lab developed IP
- Funding amount per award:
 - Phase I: Feasibility, Proof of Concept R&D \$150K or \$225K (varies by topic); 6-9 months project duration
 - Phase II: Prototype/Process R&D \$1M or \$1.5M; 24 months project duration







Available LBNL Technologies

SEARCH TE	CHNOLOGIES h	tps://ipo.lbl.gov/for-industry/							
■ Biotechnology (304) [-]									
	☐ Agriculture (23) ☐ Biomass Deconstruction (49) ☐ Human Health/Precision Medicine (109) [+]	☐ Bio-based products (77) ☐ Biomass Feedstocks (22) ☐ Microbiome (12)	□ Biofuels (59)□ Biotech Software (36)□ Synthetic Biology Tools and Software (57)						
□ Computing Sciences (26) [-]									
	□ Computer Architecture (7)□ Cybersecurity (2)□ Quantum Computing (8)	 □ CS Biotechnology (1) □ High Performance Computing (7) □ Semiconductor Tech (4) 	☐ CS Software (6) ☐ Networking Infrastructure (3)						
■ Energy Technologies (115) [-]									
	☐ Building Energy Efficiency and Analysis (11) ☐ Energy Storage (51) [+]	☐ Electricity Grid (4) ☐ Industrial Heating and Energy Efficiency (4)	☐ Energy Generation (20) ☐ Materials (6)						
□ Humanita									
	Advanced Materials (58) [+] Semiconductors (28)	☐ Electronics (3) ☐ Sensors and Detectors (49)	☐ Photonics (19) ☐ Spectroscopy and Microscopy (52) [+]						
□ Water, Air (31) [-]	, Geosciences, and Environment								
	☐ Air treatment and monitoring (2) ☐ Materials for Water, Air, Environment (4)	☐ Environmental Technologies (13) ☐ Water treatment (16)	☐ Geosciences (4)						





Key Takeaways

We are always looking for partners to cost share or apply for funding to commercialize our IP



For more information about licensing and commercializing LBNL IP, contact me at

shanshanli@lbl.gov

Principal Technology Commercialization Associate Intellectual Property Office



https://ipo.lbl.gov/for-industry/

