

GOVERNMENT & COMMUNITY RELATIONS

# LBNLNEXT

Cultivating the Next Generation in STEM





**BERKELEY  
LAB**



**GOVERNMENT & COMMUNITY RELATIONS**

# **K-12 STEM EDUCATION & OUTREACH PROGRAMS**

**Cultivating the next Generation in STEM**





How do we leverage  
**nationals labs** to create  
authentic **STEM**  
experiences and develop  
the **next generation** in  
**STEM?**





# Strengths of National Lab K-12 Programs



## STEM PROFESSIONALS

Students are exposed to diverse mentors and role models with careers in many fields



## CUTTING-EDGE FACILITIES

One-of-a-kind instruments and spaces can inspire and engage students



## ACTIVE RESEARCH

Students can actively witness cutting edge research and see how they can contribute



# The best way to get involved...

[Sign up for community activities here](#)

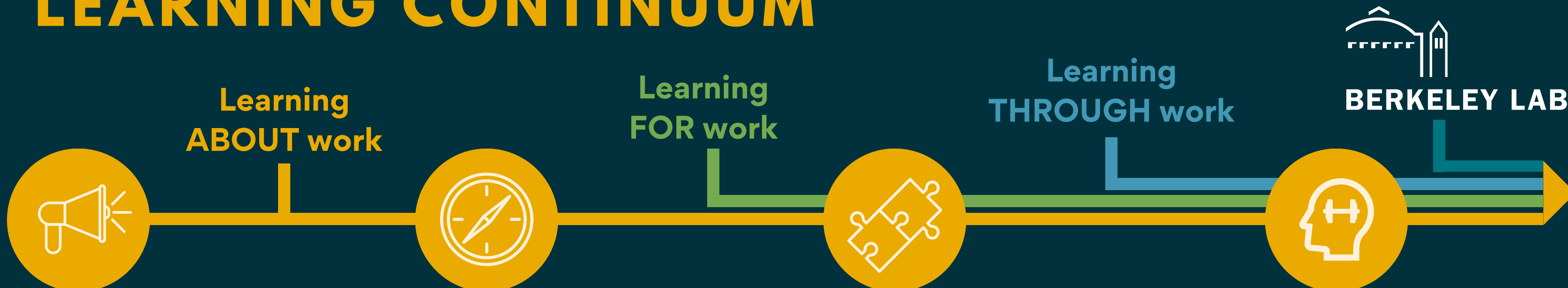


Berkeley Lab volunteer sign-ups are now hosted on Galaxy Digital. [Click here](#) for a short summary of current volunteer programs, sign up forms, and time commitments. More details about volunteering for each program are available on the Galaxy Digital page.

[service.lbl.gov](http://service.lbl.gov)



# K-12 WORK-BASED LEARNING CONTINUUM



## CAREER AWARENESS

Broaden student options via awareness of careers and the role of education.

## CAREER EXPLORATION

Explore career options to motivate and inform student decision-making.

## CAREER PREPARATION

Apply practical experiences to develop the knowledge and skills necessary for success.

## CAREER TRAINING

Train for employment and/or postsecondary education in a specific range of occupations.

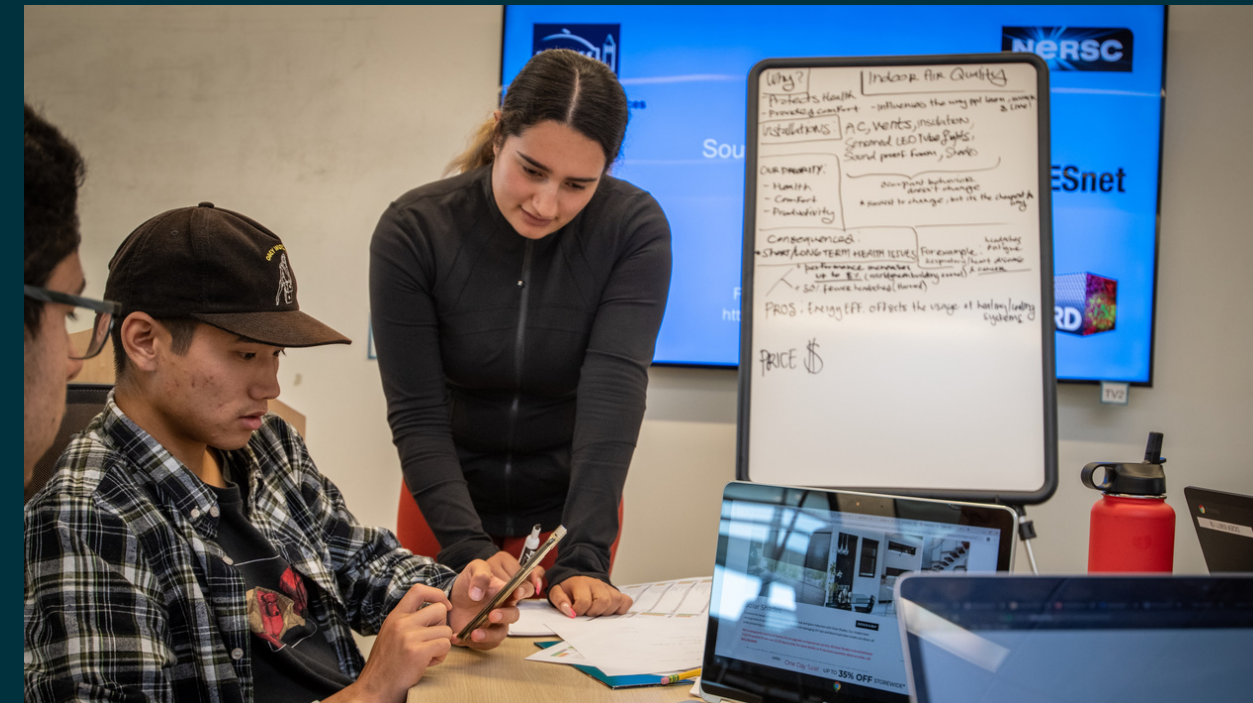
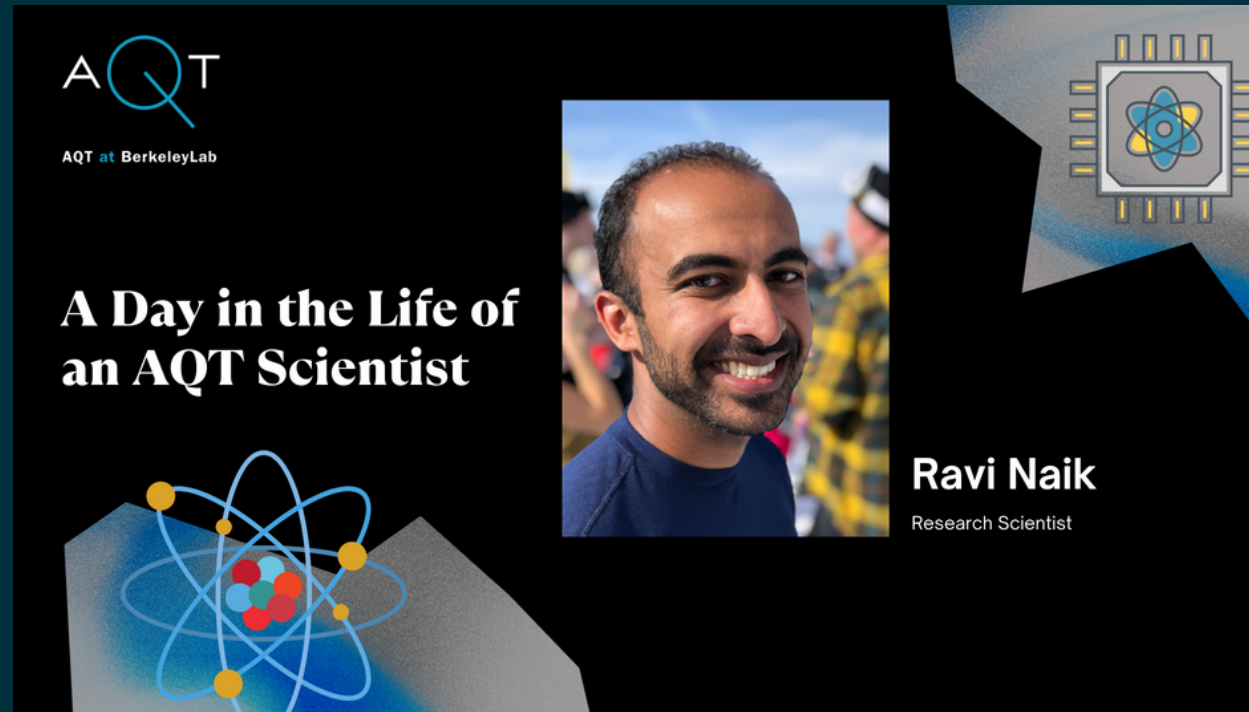
### RELEVANT K-12 PROGRAMS:

- Let's Talk About STEM
- AfterSchool Science Hour
- Live Science





# School and Public Programming

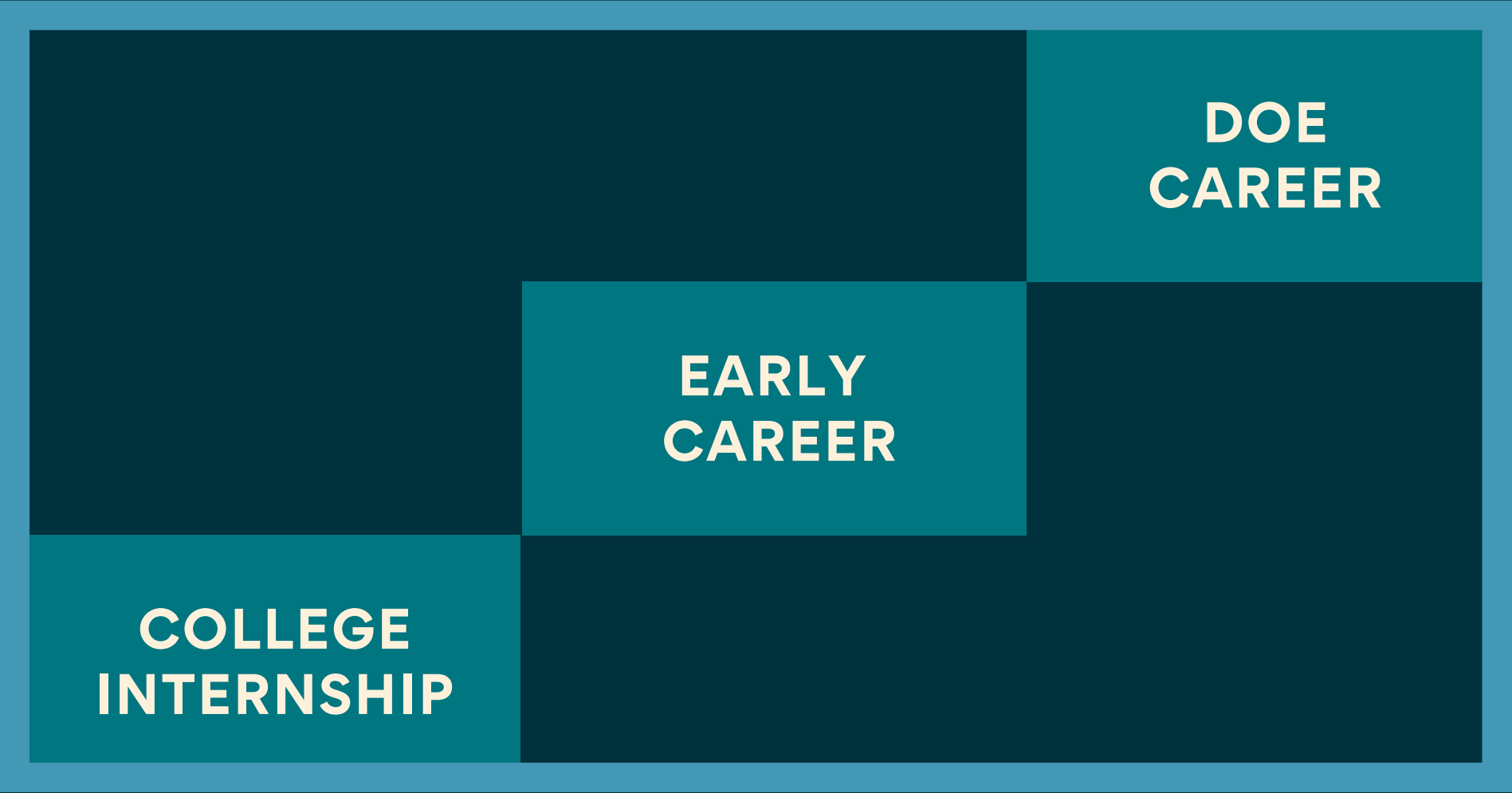


Hands-on learning and interactive engagement opportunities



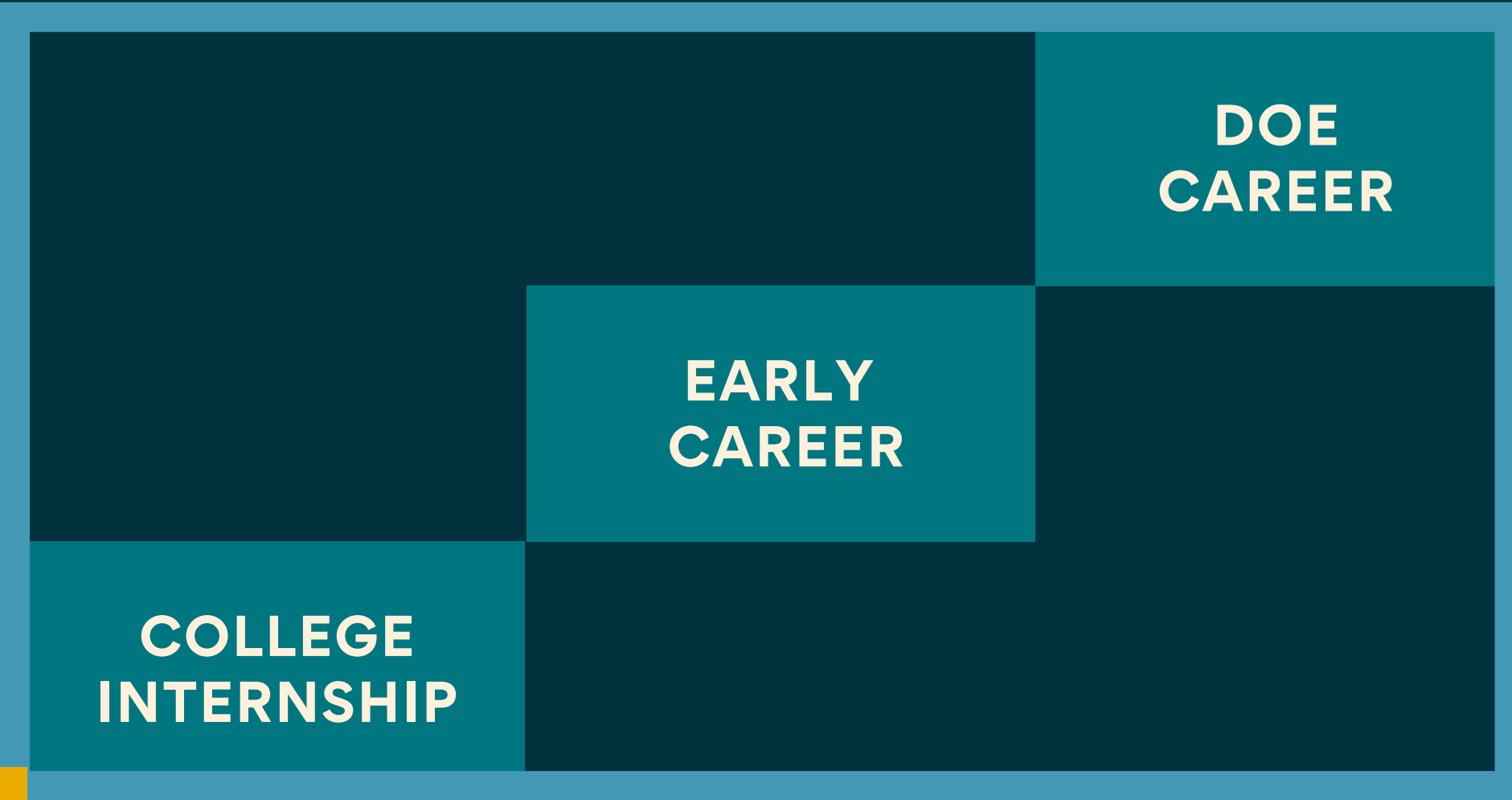


**AWARENESS**





# K through Career Engagement



AWARENESS

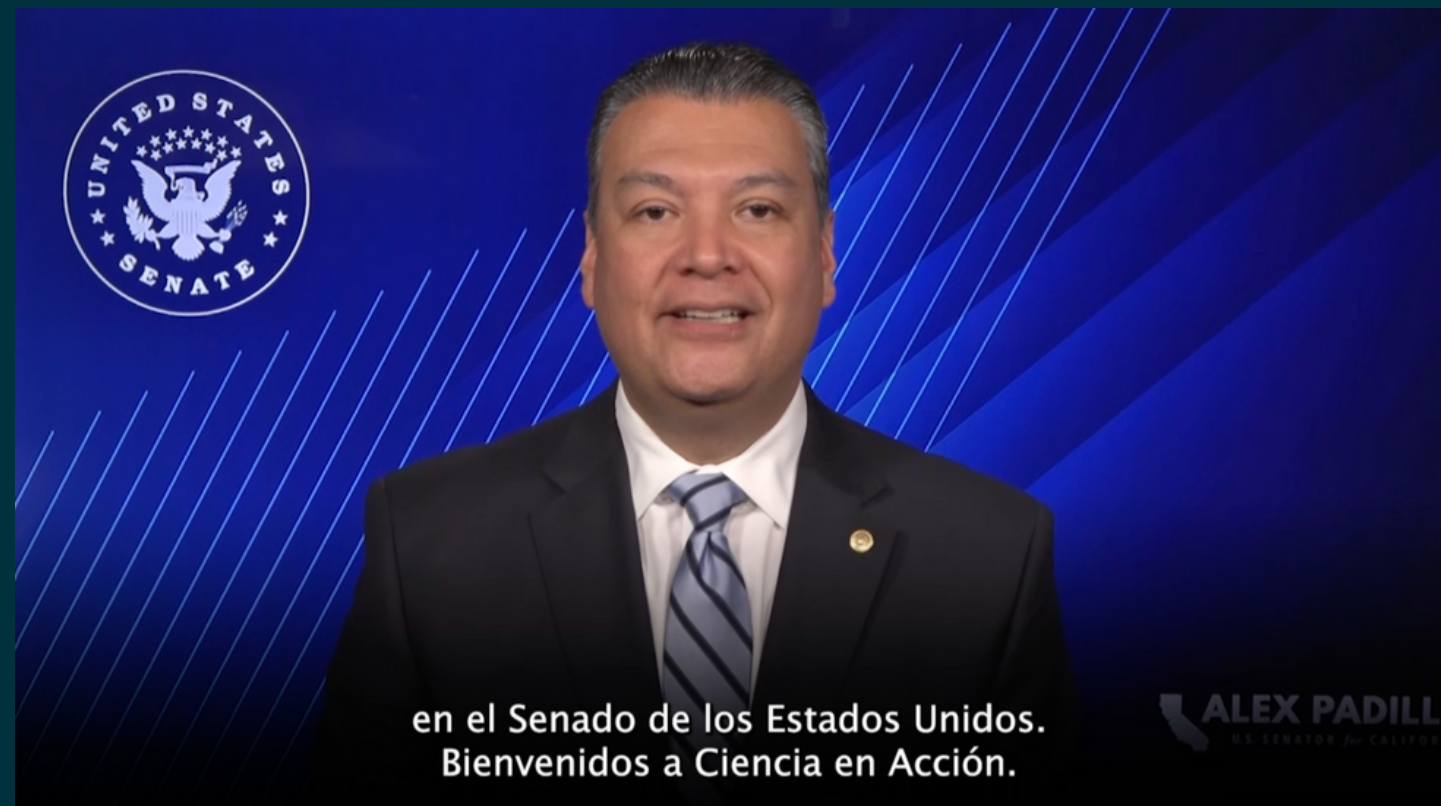




# ADDRESSING BARRIERS TO PARTICIPATION

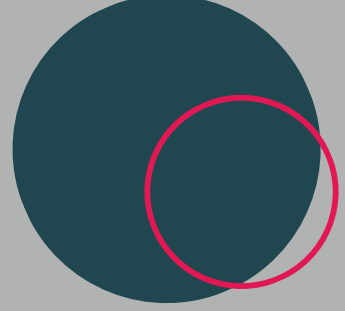






# Campamento bilingüe de STEM





# SAGE



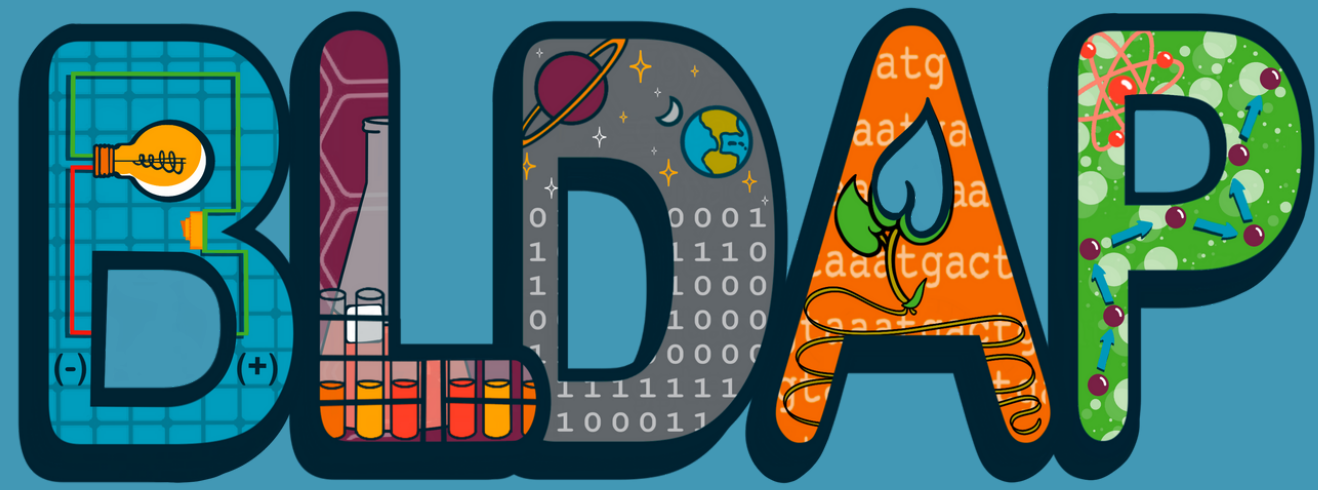
## Science Accelerating Girls' Engagement

A one-week program connecting young women  
with STEM professionals

- 150+ students since 2020
- 6 alumni completed a 2022 internship at LBNL
- 27 students (in person) for 2022
- 55 LBNL applications in 2022
- Joint National Lab initiative (SLAC, LLNL, Fermi, LANL, ORNL)







Berkeley Lab Director's Apprenticeship Program

## Berkeley Lab's introductory STEM career experience

An opportunity to gain technical skills and prepare for an internship

- 59 students since 2020
- ~50% return for EinR (internship)
- 23 students (in person) for 2022
- 97 applications in 2022
- Working on publishing an open source data science and python course

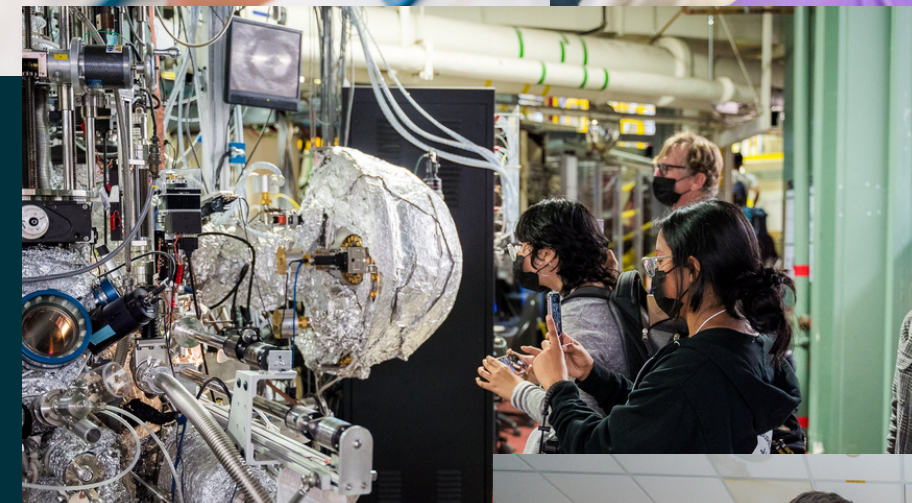




# Building Skills and Relationships with the Next Generation



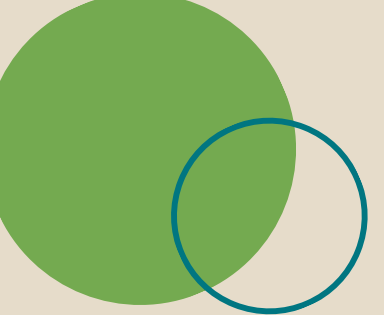
Evelynn Posdas  
SAGE 2021  
BLDAP 2022



Alejandro Rodriguez  
SeA 2022  
BLDAP 2022







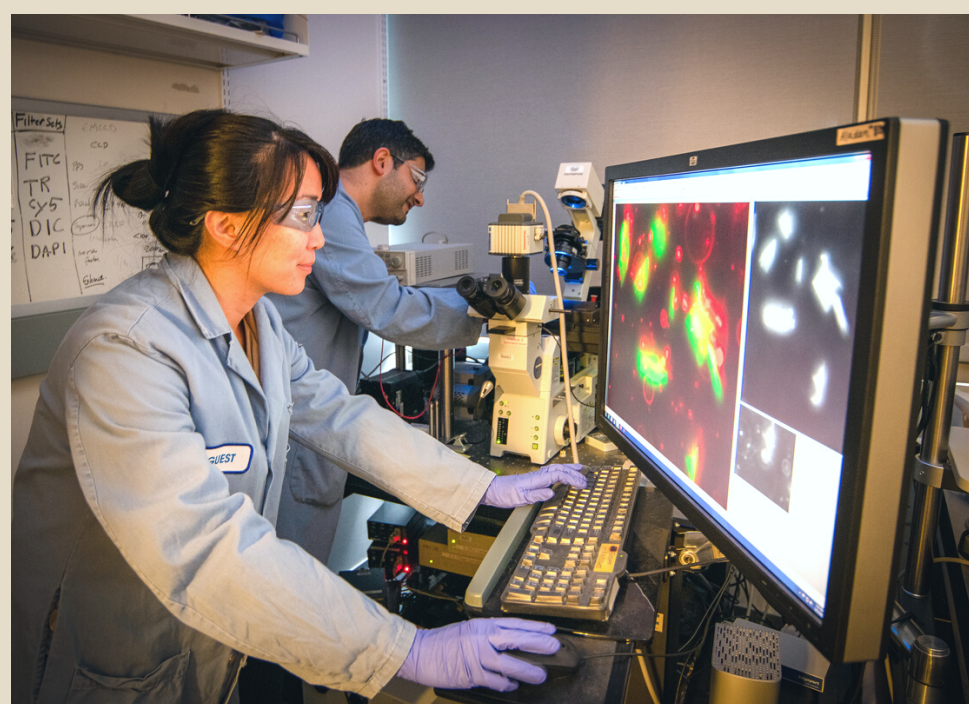
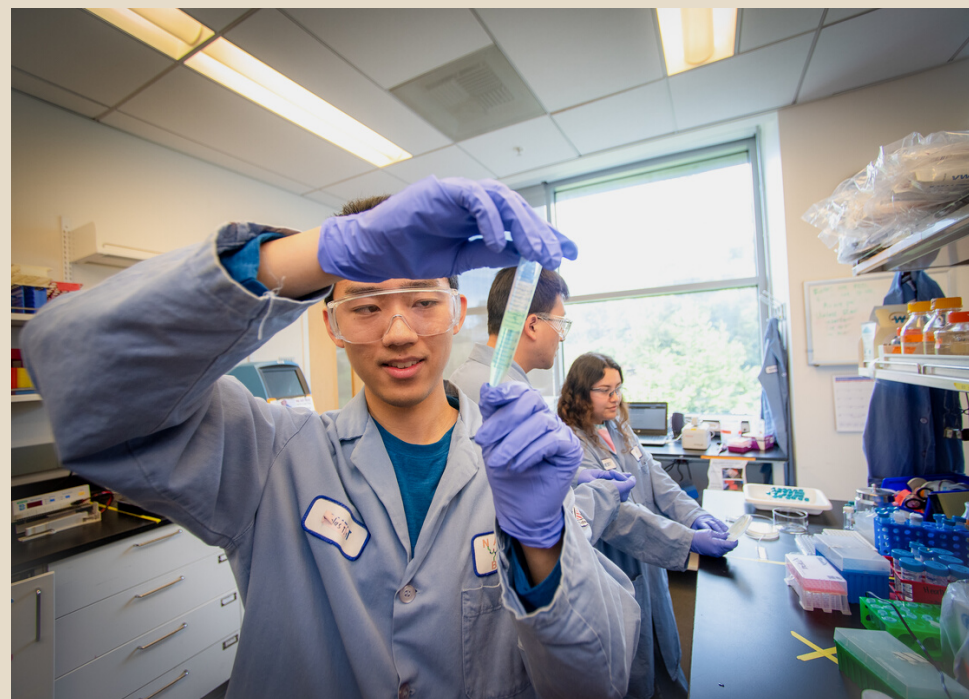
# Experiences

 In research

**Berkeley Lab's advanced internship program for high school students**

An opportunity to work on an individual project with a Berkeley Lab employee

- 94 students since 2021
- 48 students (virtual) in 2022
- 154 applications in 2022

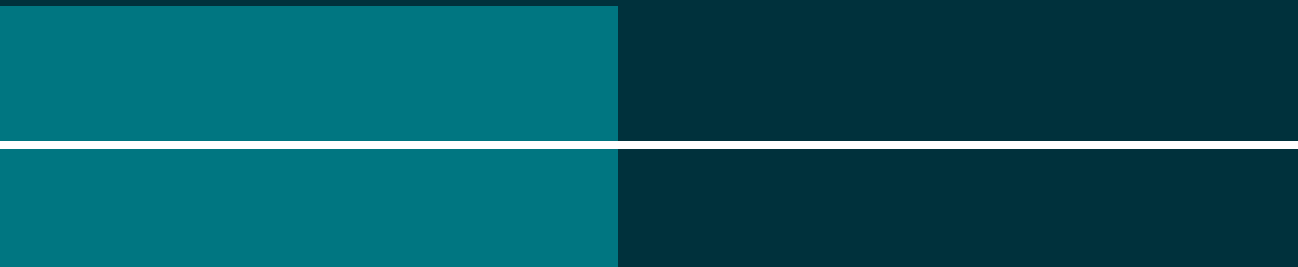




# K-12 Programming Benefits



- Increased visibility and engagement with the public
- Optimal recruitment activities for students and families
- Professional development of a diverse workforce of the future
- Skilled, diverse staff ready to build emerging technologies, solve problems , and take advantage of current DOE initiatives





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# THANK YOU

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