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Workforce Development & Education **BERKELEY LAB** 







lbl.gov

science.osti.gov/wdts

Impact Report

Inspiring and preparing the next generation of scientists, engineers, technologists, and STEM professionals, Berkeley Lab Workforce **Development & Education** (WD&E) offers a range of programs for undergraduate, postbaccalaureate, graduate students, and faculty.



### **Berkeley Lab** Workforce Development & Education

# Our Approach

Programs are developed and executed according to Core Requirements and Model Practices established by the Department of Energy (DOE), Office of Science, Workforce Development for Teachers and Scientists (WDTS). For more information: https://science.osti.gov/wdts

WD&E programs align with the 2018 Committee on STEM Education (CoSTEM) 5-Year Plan on STEM Education of the National Science and Technology Council, Executive Office of the President of the United States.

#### WD&E PROGRAMS

**BLUFF** Berkeley Lab Undergraduate Faculty Fellowship **BLUR** Berkeley Lab Undergraduate Research **CCI** Community College Internship **EERE** Energy Efficiency & Renewable Energy **GEM** Graduate Degrees for Minorities for Engineering and Science MLEF Mickey Leland Energy Fellowship **SCGSR** Office of Science Graduate Student Research **SOAR** Soar for Youth **STEM CORE** SULI Science Undergraduate Laboratory Internship **VFP** Visiting Faculty Program

#### **Enrichment Activities & Deliverables**

34

Spring, Summer, Fall Sessions 2022			
Papers	STEM/Networking Activities		

#### **Science Areas**

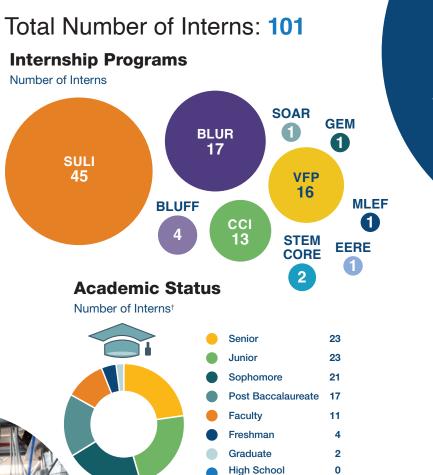
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Number and Percentage of Internst

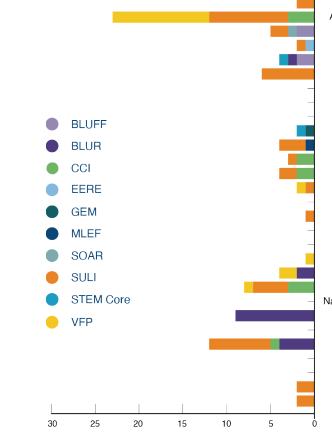
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Physical Sciences	Computing Sciences	Energy Sciences	Earth & Environmental Sciences	Energy Technologies	Biosciences	Operations
30	27	15	10	7	11	1
30%	27%	15%	10%	7%	11%	1%

**Posters** 

85

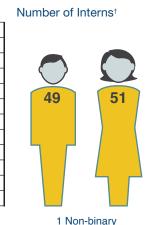


#### **Internship Programs by Division** Number of Interns



Largest number of **Community College Interns & Visiting Faculty Collaborators** of all DOE National Labs.

#### **Male/Female Ratio**



60

50 –

40 -

30 -

20 —

10 —

Accelerator Technology & Applied Physics (5) Advanced Light Source (2) Applied Mathematics and Computational Research (23) Biological Systems & Engineering (5) Building Technology & Urban Systems (2) Chemical Sciences (4) Climate & Ecosystems Sciences (6) Cyclotron Road (0) Directorate (0) DOE Joint Genome Institute (JGI) (0) Energy Analysis & Environmental Impacts (2) Energy Geosciences (4) Energy Storage & Distributed Resources (3) Engineering (4) Environmental Genomics & Systems Biology (2) Environment Health & Safety (0) Facilities (1) Human Resources & Workforce Diversity (0) Information Technology (0) Materials Sciences (1) Molecular Biophysics & Intergrated Bioimaging (4) Molecular Foundry (8) National Energy Research Scientific Computing Center (0) Nuclear Science (9) Office of the Chief Financial Officer (0) Physics (12) Project Management Office (0) Protective Services (0) Scientific Data (2) Scientific Networking (2)

28.7%

of the participants are Underrepresented Minorities (URMs) American Indian or Alaska Native. Black or African American, Hispanic or Latinx. Native Hawaiian or Pacific Islander, and two or more races

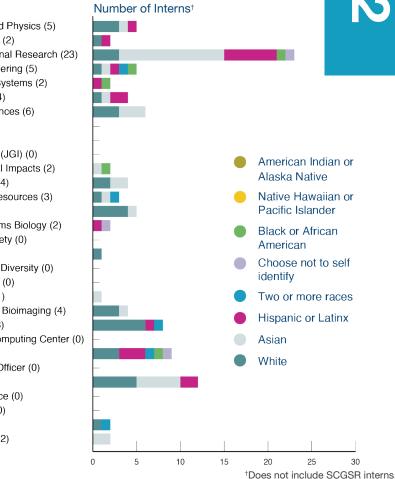
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#### **Ethnicity**

Number	of	Interns*
1 autoor	0.	11101110

	American Indian or Alaska Native	<10
•	Native Hawaiian or Pacific Islander	<10
	Black or African American	<10
	Choose not to self identify	<10
	Two or more races	<10
	Hispanic or Latinx	19
	Asian	32
	White	37

**Ethnicity by Division** 

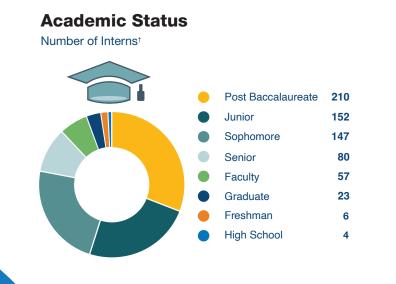


### **Berkeley Lab** Workforce Development & Education

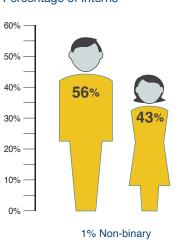
#### Berkeley Lab is one of the **TOP 5 LARGEST** NATIONAL LABORATORY PROGRAMS

in the DOE Office of Science Workforce Development for **Teachers and Scientists** 

#### Total Number of Interns 2018 – 2022: 638



#### **Male/Female Ratio** Percentage of Interns<sup>†</sup>

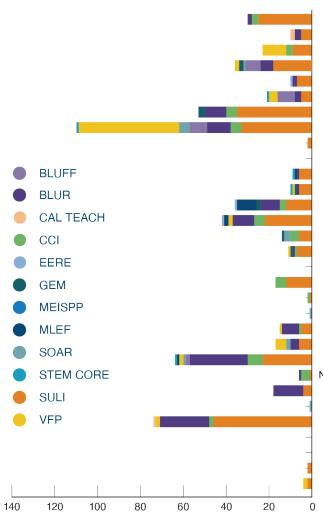


<sup>66</sup> The interns I had the opportunity to supervise at Berkeley Lab have always had great motivation and a strong desire to learn. Some of the small research projects sometimes have led to whole new areas of inquiry – and it's always an immense pleasure to see them thrive, get accepted in grad school and become scientists in their own rights. " \_\_\_\_ Antoine Wojdyla,

**Research Scientist** Advanced Light Source



#### **Internship Programs by Division** Number of Interns



#### Building Technology & Urban Systems (10) Chemical Sciences (21) Climate & Ecosystems Sciences (53) Computational Research (110) Cyclotron Road (2) Directorate (0) DOE Joint Genome Institute (9) Energy Analysis & Environmental Impacts (10) Energy Geosciences (36) Energy Storage & Distributed Resources (42) Engineering (14) Environmental Genomics & Systems Biology (11) Environmental Health & Safety (0) Facilities (17) Human Resources & Workforce Diversity (2) Information Technology (1) Materials Sciences (15) Molecular Biophysics & Integrated Bioimaging (17) Molecular Foundry (64) National Energy Research Scientific Computing Center (6) Nuclear Science (18) Office of the Chief Financial Officer (1) Physics (74) Project Management Office (0) Protective Services (0)

Scientific Data (2) Scientific Networking (4)

Accelerator Technology & Applied Physics (30)

Advanced Light Source (10)

Appllied Mathematics & Computational Research (23)

Biological Systems & Engineering (36)

#### **Ethnicity**

Number and





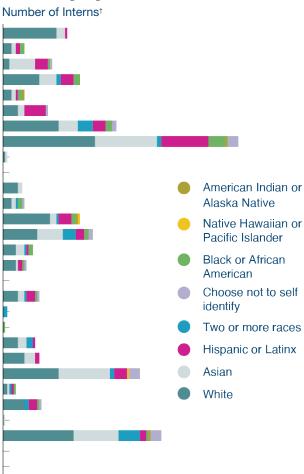
### 26.7%

of the participants are Underrepresented Minorities (URMs) American Indian or Alaska Native, Black or African American, Hispanic or Latinx, Native Hawaiian or Pacific Islander, and two or more races

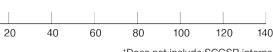
## Percentage of Interns<sup>†</sup>

<ul> <li>American Indian or Alaska Native</li> <li>Native Hawaiian or Pacific Islander</li> <li>Choose not to self identify</li> <li>Black or African American</li> <li>Two or more races</li> <li>43 &lt;10%</li> <li>Hispanic or Latinx</li> <li>Asian</li> <li>156 24%</li> <li>White</li> <li>287 45%</li> </ul>				
<ul> <li>Pacific Islander</li> <li>Choose not to self 25 &lt;10% identify</li> <li>Black or African 33 &lt;10% American</li> <li>Two or more races 43 &lt;10%</li> <li>Hispanic or Latinx 88 14%</li> <li>Asian 156 24%</li> </ul>	•		<10	<10%
<ul> <li>identify</li> <li>Black or African American</li> <li>Two or more races</li> <li>Hispanic or Latinx</li> <li>Asian</li> <li>156</li> <li>24%</li> </ul>	•		<10	<10%
AmericanControlTwo or more races43Hispanic or Latinx88Asian15624%		0	25	<10%
Hispanic or Latinx8814%Asian15624%			33	<10%
Asian 156 24%		Two or more races	43	<10%
•		Hispanic or Latinx	88	14%
White 287 45%		Asian	156	<b>24%</b>
		White	287	45%

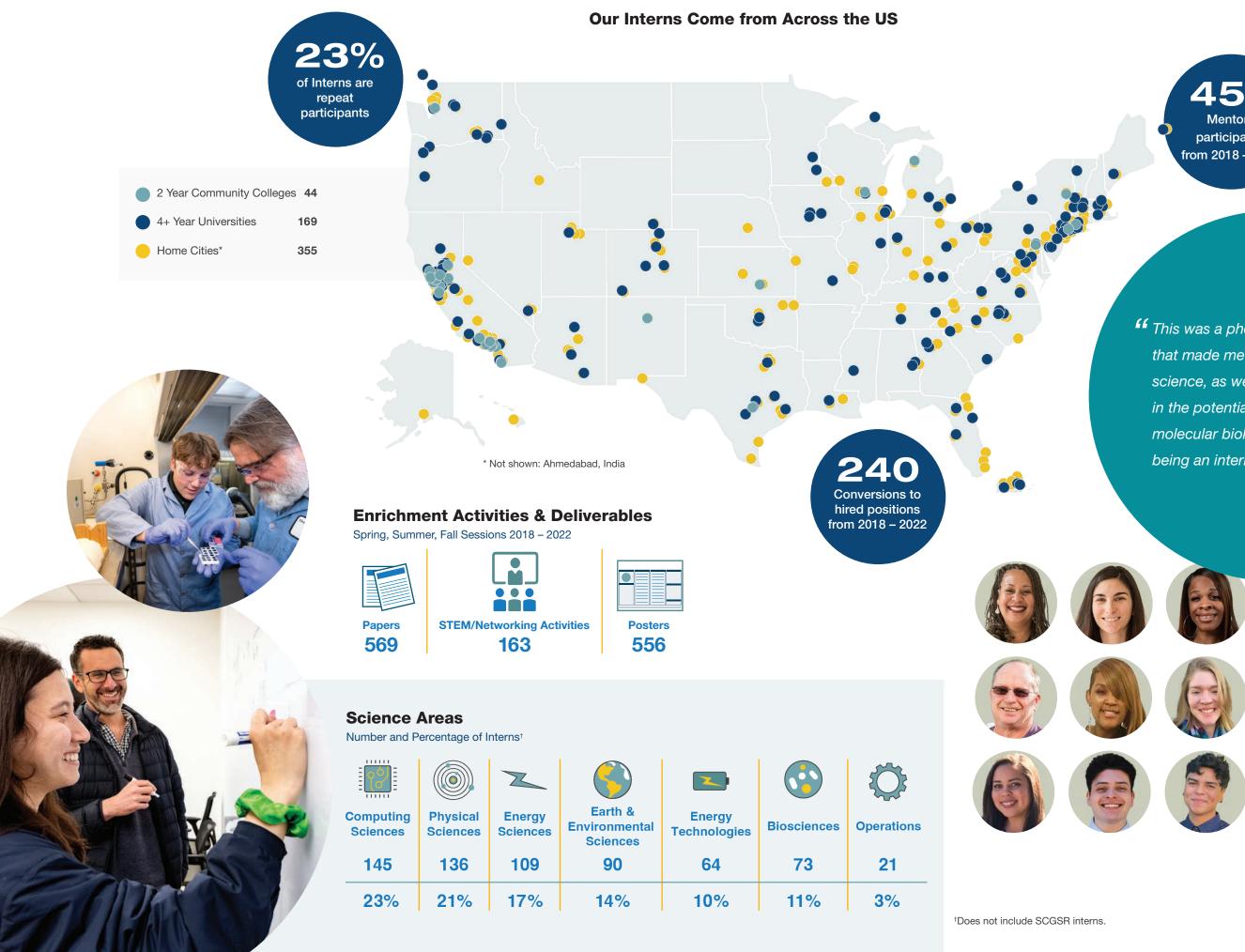
#### **Ethnicity by Division**



By the Numbers: 2018 2022



<sup>†</sup>Does not include SCGSR interns.





*<sup>11</sup> This was a phenomenal experience* that made me realize that I belong to science, as well as gave me confidence in the potential I have as a biochemist/ molecular biologist. It was an honor being an intern at Berkeley Lab. "

> – Dabne Herrera Huerta Fall 2022



