



BOLTS

BRIDGING OPPORTUNITIES FOR LEADERSHIP AND TRAINING IN STEM

Bridging Opportunities for Leadership and Training in STEM (BOLTS) is a mentorship program between PNNL researchers and students from local underserved high schools. The program is tailored to increase students' confidence and expose them to multiple careers and opportunities in science, technology, engineering, and math (STEM)-related fields, with an initial focus on careers in computing analytics.

The mentorship program follows a cohort model. Each cohort participates in a formal capacity for three years. Students in each cohort have opportunities to participate in as many as three computing related STEM internship experiences at a national laboratory. They publish and present their research, network with scientists and staff, learn about scholarship and research opportunities, and build the confidence to pursue STEM through college and career.

VISION

Increase the number of students with computing skills and interests in the STEM pathway from historically underrepresented populations, including females.

GOALS

- » Create long-term student/mentor relationships and internship opportunities, with a focus on students with limited access or exposure to STEM careers.
- » Motivate teens to graduate from high school, pursue college, develop computing skills, and select a STEM major and/or career.

WHAT TO EXPECT

As part of the BOLTS program students will receive:

- » Support and guidance to explore and develop computing skills in STEM areas.

- » Mentorship support within the STEM-related area they have chosen.

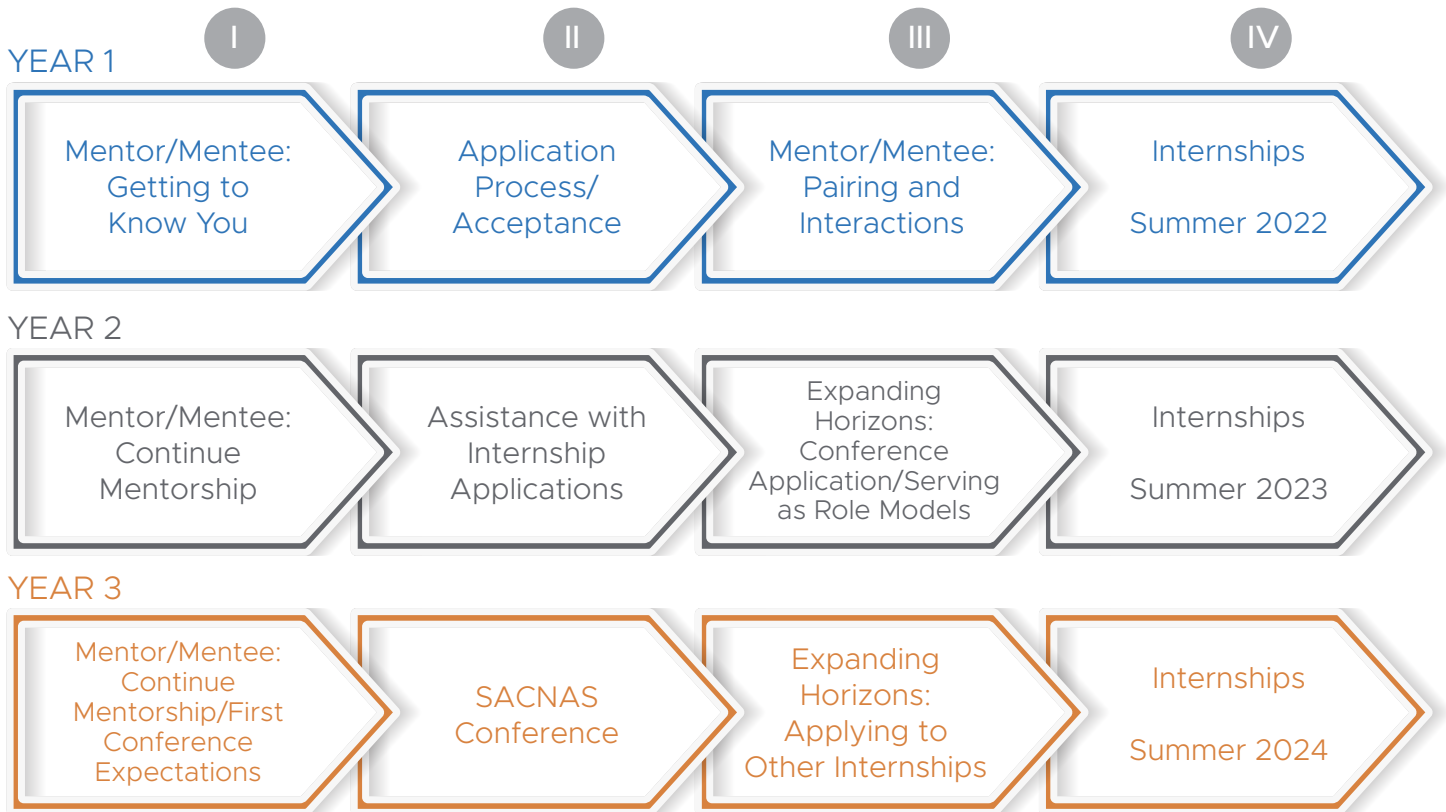
- » Guidance on how to apply for scholarships, PNNL internships, and other opportunities.

Participating scientists receive training on how to be successful mentors to high school students from diverse backgrounds.

AUDIENCE

The BOLTS program is designed for students who have expressed initial interest in STEM but may have real or perceived barriers to fulfilling that potential. Participants are recommended either by their teachers or by coordinators from the nonprofit Communities in Schools. Each cohort has a duration of at least three years, beginning during the students' junior year in high school and continuing through their first year of college.

BOLTS COHORT PHASES



YEAR 1: Students and mentors meet each other. Mentors share their work in STEM careers with the students. The students and mentors are later matched based on input from both the mentors and mentees. Students receive guidance on the internship application process and expectations of internships. Upon completion of internships, students present their work to their peers and the scientific community.

YEAR 2: Participating students continue to be mentored by scientists. The students share their experiences at the national laboratory with others. They learn about college internships available at various national laboratories, including PNNL. They also receive guidance on the process for applying to college and to the Society for Advancement of Chicanos/Hispanics & Native Americans in Science conference. At the end of this year, students are encouraged to apply for a second internship experience.

YEAR 3: Students continue to meet with their mentors and attend their first conference. Students are exposed to other internship opportunities at and beyond PNNL (e.g., Science Undergraduate Laboratory Internships). By the end of this year, the students are expected to apply for another internship.

For more information, contact:

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