

ALVA HIGH SCHOOL 2016

June 19 – August 19

The Alliances for Learning and Vision of Underrepresented Americans (ALVA) is a nine week, residential summer program for rising high school seniors (class of 2017) interested in computer science and data analysis, especially as they are applied to other STEM fields. A minimum of 6 students will be selected. We strongly encourage applications from populations who are underrepresented and underserved in STEM fields:

- Underrepresented minority groups (i.e., African Americans, Hispanic Americans, Native Americans, Alaskan Natives, Native Hawaiians, Filipinos and Pacific Islanders)
- Economically disadvantaged
- The first in their family to attend college
- Women
- Students living with disabilities

The program will be run jointly with the UW GenOM Project's ALVA programs for incoming freshmen. ALVA High School students will participate in daily math and Java programming courses which will extend the full length of the program. The purpose of these courses is to prepare students for careers in the growing field of Big Data and Data Science. Students will be paired with a mentor in a research laboratory. They will also participate in a seminar on writing a college application statement of purpose and finding scholarships. Every other weekend will be free for students to visit home should they choose to.

PROGRAM GOALS

When students conduct research, they gain a rare and insightful experience. This opportunity gives students a head start in the university research setting and helps them build relationships with a cohort of students who are also interested in pursuing higher education. Some of the benefits for participating in the summer program include:

- Encourage students to pursue STEM careers
- Gain first-hand, quality experiences in laboratories of established researchers
- Improve student knowledge about the nature of research including ambiguity, evolving understanding, and the open nature of research
- Develop inquiry skills including formulating research questions, experimental design, analysis, scientific communication, and envisioning future steps
- Establish relationships with undergraduates, graduate students, faculty and advisers that will be beneficial for your upcoming college experience
- Learn about the impact of this field on engineering and society
- Receive academic training in math and computer science
- Build presentation and scientific writing skills
- Explore the rapidly expanding field of Big Data and Data Science

PROGRAM DETAILS

- Data science project placement
- Math and Java programming classes (Monday-Friday)
- Tutoring (Sunday-Thursday)
- College preparatory seminar
- Weekly lunch seminar
- Weekend social events
- Ethics capstone project
- Research presentation and project/paper
- Paid room and board with a residential counselor
- Paid for 8 hour days
- 9 week program (6/19-8/19)
- Every other weekend students are free to go home if they wish

HOW TO APPLY

To apply for ALVA High School 2016, send all of the following items in **one complete packet**. Please **do not staple** any parts of the application. Failure to follow application instructions may result in your application not being processed.

- ALVA High School 2016 Application (online or hardcopy)
- Official sealed high school transcript(s)
- Two (2) letters of recommendation:
 - One (1) from a *science teacher*
 - One (1) from a *personal reference* (not parents, family members, or peer friends)
- ALVA High School 2016 essay (details on page 4)
- Resume
 - Name and contact information
 - Schools attended/attending
 - Leadership, awards, and honors
 - Academic programs (MESA, Gear Up, etc.)
 - Employment experience
 - Computer skills
 - Hobbies
 - Extra-curricular activities, volunteering, community service
- Applicants who are invited to a telephone interview will be asked to provide a photocopy of their social security, permanent resident, or EAD card.

Please send applications to:

Gregory Diggs-Yang, ALVA Coordinator
UW GenOM Project
Office of Research, Box 351202
Seattle, WA 98195

APPLICATION DEADLINE: Applications must be postmarked no later than:
May 2, 2016

Questions? Please call (206) 221-4614, e-mail diggsyng@uw.edu,
or visit <http://depts.washington.edu/genomics/>

The ALVA High School program is open to US citizens and permanent residents and focuses its resources on support for training underrepresented students. However, no student will be denied the opportunity to apply to or participate in program activities based on race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, disability, residency, or status as a disabled veteran or Vietnam era veteran.

PERSONAL INFORMATION

Name _____ Date of Birth ____/____/____
 Mailing Address _____
 City, State, Zip _____
 Cell Phone Number (____) ____-____ E-Mail _____
 Parent/Guardian _____ Relationship _____
 Phone numbers h/w/c _____

HIGH SCHOOL INFORMATION

Current School _____
 Anticipated Graduation date ____/____/____ GPA _____
 Intended field of study in college or area of interest: _____

Intended Senior Class Schedule:

<i>Fall Semester</i>	<i>Spring Semester</i>

(Please check Yes or No)

Have you participated in the following:

MESA	<input type="checkbox"/>	<input type="checkbox"/>
Upward Bound	<input type="checkbox"/>	<input type="checkbox"/>
Running Start	<input type="checkbox"/>	<input type="checkbox"/>

Have you participated in any other science/engineering events or programs?

If yes, please specify _____

PERSONAL ESSAY

Please answer the following questions in essay form, typed, double spaced, maximum of two pages

- What are your long-term career and/or educational goals?
- What type of science or engineering are you most interested in and why?
- What research topics are you interested in and why?
- Please list any relevant skills (i.e., lab, computer, technical) that you have – whether you have learned them in a course, or in a lab or workplace.
- If you have already had a research experience, please briefly describe it.

HOW DID YOU HEAR ABOUT ALVA HIGH SCHOOL?

To better advertise, we would like to know how you heard about the program. Please check all that apply.

School visit Teacher Website Mailer Friend Other: _____

AVAILABILITY INFORMATION

We require full participation; therefore significant absences are discouraged and can be detrimental to the selection and placement of ALVA High School applicants.

List the dates you are available for ALVA High School 2016:

____/____/____ to ____/____/____

FORWARDING PERMISSION

Do you give us permission to forward this file, including your transcripts and letters of recommendation, to faculty who may be interested in you? Please initial.

____Yes____No ____Initials

SIGNATURE REQUIRED

Are you a: ____U.S. Citizen or ____Permanent Resident or DACA student

SIGNATURE

By signing below, I certify that to the best of my knowledge that the information provided as part of this application is complete and true.

Applicant Signature _____ Date: ____/____/____

Parent/Guardian Signature _____ Date: ____/____/____

CONFIDENTIAL INFORMATION

This page will be separated from the rest of the application prior to information being sent to anyone else. The purpose of this page is to provide coding for longitudinal identification (i.e. SSN) and demographic information (i.e., ethnicity, birthdate) for the granting agency (National Institutes of Health). Completion is voluntary. Failure to complete will not adversely affect your application to or participation in the program.

Social Security Number (*for US citizens*): _____

Permanent Resident/Alien ID Number: _____

EAD Number: _____

Gender: _____

Ethnicity: _____

Number of People in household: _____

Highest Educational Level of Mother: _____

Highest Educational Level of Father: _____

Parent 1 Occupation: _____

Parent 2 Occupation: _____

Parent 1 Annual Income: _____

Parent 2 Annual Income: _____

Your Annual Income: _____