PUMAS 2014-23

PROMOTING UNDERREPRESENTED MINORITY ADVANCEMENT IN THE SCIENCES

What is it?

- An nine-week **paid biomedical research internship** funded by the National Institutes of Health (NIH)
- Gives hands-on lab **experience, networking** opportunities with research faculty, and **exposure** to different career paths in science and health
- PUMAS's principal investigators and graduate student/post-doc mentors **are committed to building gender and ethnic diversity in STEM/health**

Who is it for?

- **Underrepresented* community college students** with intentions to transfer to four-year institutions as STEM majors
- **Small cohort** (8-12 students) accepted per year

Who were the participants?

There were **70 unique interns** in the program from 2014-2023.

91% were from underrepresented populations*

3.49 average college GPA

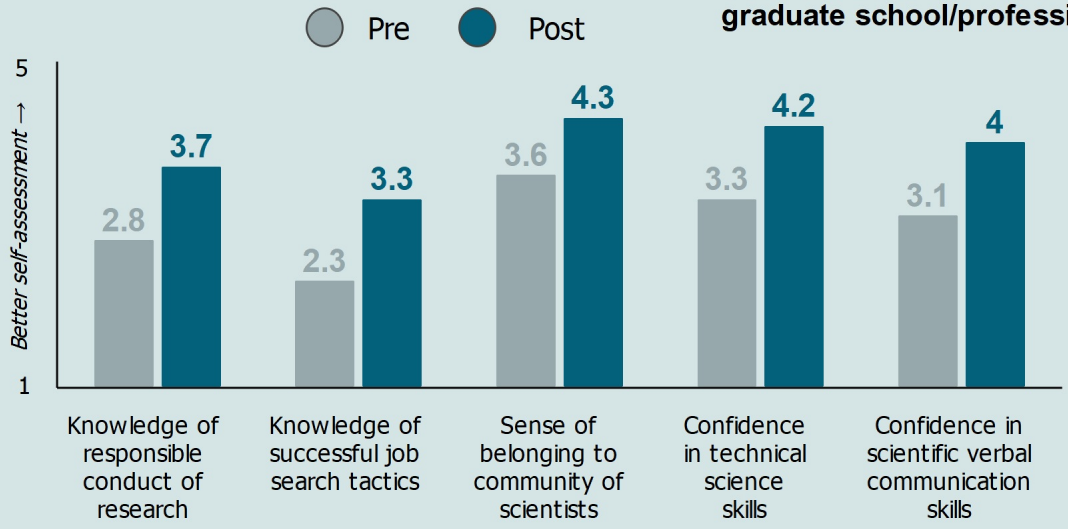
77% first-generation college students

$104,241 median household income (in 2021 dollars)

99% aimed to pursue a STEM-related degree at a UC or comparable institution

Effect of the Program

The 2014-2023 interns increased their **sense of belonging as scientists**, confidence in their **science skills**, and knowledge of **career readiness** and **graduate school/professional topics**



The 2014-2023 interns **increased the average size of their STEM networks** from 19 contacts at the start of the program **to 42 contacts** at the end

* The National Institutes of Health (NIH) considers members of the following populations to be underrepresented or marginalized (URM) in biomedical research: Persons with physical or mental disabilities as per the Americans with Disabilities Act, persons who identify as being from one or more racial and ethnic groupsthat are defined by the National Science Foundation as URM – Black/African American, Hispanic/Latino, American Indian or Alaska Native, Native Hawaiian, and other Pacific Islander – and persons from disadvantaged backgrounds who meet at least two of seven criteria listed by the NIH. See *Notice of NIH's Interest in Diversity,* Notice #NOT-OD-20-031. 2019. Access via https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-031.html. Note that Gladstone and the University of California, San Francisco have additionally determined that members of the Filipinx population are URM.

Alumni/ae

70 alumni/ae completed the PUMAS program between 2014 and 2023; of the 39 recent alumni/ae (2018-2022), **38%** responded to the 2023 follow-up survey and are represented in the five statistics below.

86%
sustained or increased interest in biomedical science

100%
intend to pursue STEM-related careers

100%
completed, attending, or transferring to 4-year institutions (e.g., UC Berkeley, UC Davis)

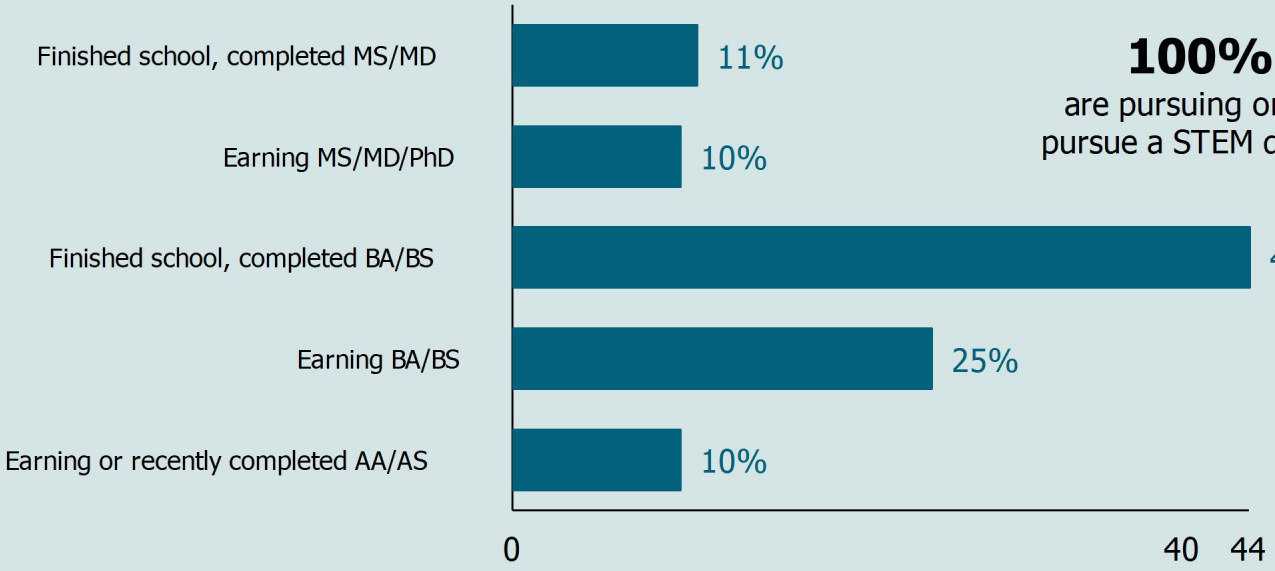
93%
aspire to advanced degrees (M.S. or higher)

77%
of alumni/ae were in contact with PIs and/or mentors last year

Alumni/ae Career Paths

The PUMAS team has tracked the career paths of **61** 2014-2022 alumni/ae (**97%**).

100%
are pursuing or did pursue a STEM degree



GLADSTONE INSTITUTES

Founded in 1979, Gladstone Institutes is an independent biomedical research institution with a focus on finding new pathways to cures. Over 350 scientists and trainees work at Gladstone using science and technology in cardiovascular biology, immunology, neuroscience, virology and data science, and stem cell biology to study unsolved diseases. A common belief of the organization is that diversity will bring the best solutions to the world's scientific challenges.

actionable insights

Actionable Insights is a consulting firm that helps organizations discover and act on data-driven insights. Using their expertise in applied research and program evaluation, the firm's partners work with nonprofits and government agencies to measure impact in the areas of health and wellness, housing, STEM education, and youth development.