



# FLi Sci – Theory of Change



PROBLEM STATEMENT

Many academics come from wealthy backgrounds, and currently there are very few resources to actively position low-income students to become scientific researchers

INPUTS

Financial Resources

Science Experts

High-quality Curriculum

Community Partnerships

Assumptions

ACTIVITIES



OUTPUTS

Creation of an 4-6 month research fellowship program that teaches FLi students the intricacies navigating a scientific career through hands-on and interactive activities

Public repository via AirTable of profiles of scientists that pledge to serve as a resource and support FLi students

Open-access asynchronous syllabi students and instructors may use to acquire vital scientific research training (e.g., how to program experiments, analyzing data using R or Python)

Partnership with organizations and high schools that currently serve FLi students (e.g., TRIO Upward Bound programs) to target and collaborate with students

SHORT-TERM OUTCOMES

20-40 high school students each year are trained and ready to actively pursue future scientific opportunities in research

More transparency on which academic professionals identify as FLi or allies in support of FLi students

Constant access of scientific curriculum for students to leverage if no opportunities exist

Academic institutions identifies high-need students that match FLi Sci's values to guarantee sufficient number of students to support each year of programming

LONG-TERM OUTCOMES

Significantly higher number of applicants from FLi backgrounds earn admission to STEM doctoral programs AND successfully finish their program

Network of STEM professionals actively recruiting and supporting FLi students; accessible via website for students to contact and connect beyond FLi Sci programming

FLi students develop integral research abilities that position them for success in earning scientific positions at the college and/or graduate level

Maximize distribution of resources and mutually support organizations respective success and reducing redundancy

- FLi students will actively engage in science programs if provided
- High school students are qualified for research experiences
- Exposure is sufficient and necessary to get students interested in science
- STEM professionals are eager to support FLi students at the high school level

IMPACT

Substantially increase the number of leading scientists at the university or government-level that come from first-generation or low-income backgrounds