

Talaria Summer Institute (TSI) is a free STEM research mentorship summer program for female and genderqueer high school students. TSI was founded in 2020 by ATHENA By Women In STEM (ABWIS), an organization that aims to breach educational inequity by providing research and STEM opportunities, to provide research opportunities to students from disadvantaged backgrounds. TSI is student-run, and 4 programs have been held in 2020, 2021, 2022, and 2023 with over 400 mentees.

TSI is made possible by the support of graduate students, postdoctoral scholars, and professors who generously volunteer their time to serve as mentors for the program. We are currently seeking mentors for the 2024 program. The remainder of this document contains a detailed explanation of the mentorship process. If you are interested, please sign up [here](#).

1 Mentee Selection

Applicants are high school students who identify as female or genderqueer. To apply, they answer questions about what they want to research, what experience they have in that field, and why they want to be a TSI mentee. They also select one teacher to send in a recommendation form. During round 1, mentees are selected based on the passion demonstrated in their application, how much attending TSI would benefit them (e.g. if they won't have the chance to experience research otherwise), and whether they are hard-working, responsible, mature, and likely to complete the program. Most mentees do not have prior research experience and some may lack access to advanced STEM courses.

In April, each mentor will receive a list of 5-10 applicants whose interests generally match the mentors' research topics. This includes the applicant's short answer responses and transcript. The mentor will be sent a form where they can list their mentee preferences and the maximum number of mentees they would be interested in mentoring. Many mentors only mentor one mentee, but mentors may mentor as many mentees as they would like. The process would be the same for mentoring each mentee, and each mentee would work on a separate project during the program. Talaria will assign them to one or more of these mentees. If the mentor is not interested in mentoring any mentees, they can also let Talaria know and return as a mentor the next year.

2 Mentee Preparation

During June, the mentor should prepare a brief research project that the mentee could feasibly complete during July. The project does not have to be experimental and can be a literature review. Examples of past projects can be found [here](#). The mentee and mentor can set up 6 meetings each week during the Talaria program in July and August. If the mentor and mentee live in the same location, the mentor is not obligated to but can meet with the mentee in person if they feel comfortable. The mentor can also send the mentee resources such as papers and videos to review during June in preparation.

The following are guidelines for the program, and the ultimate structure is up to the mentor.

3 Talaria Week 1

During the meeting, the mentor should introduce the project and required techniques and assess the mentee's understanding of the project. The mentor should provide additional materials to assist understanding and give the mentee homework to prepare for the start of the project such as reading these materials, downloading software, etc.

4 Talaria Week 2/3

During the meeting(s), the mentor should introduce the mentee to the procedure and give them guidance on how to complete the project. During this week, the mentee should collect data or complete other necessary work to do the project.

5 Talaria Week 4/5

The mentee should continue working on the project if it is not complete. During the meeting, the mentor should introduce formal scientific writing and help the mentee analyze results if applicable. After the meeting, the mentee should begin drafting their paper. Further information on the format and requirements of the paper will be provided.

6 Talaria Week 6

The mentee should submit a complete draft of their paper to their mentor. During the meeting, the mentor can give suggestions and help the mentee make final edits.

If you decide to become a mentor, further details will be sent before the start of the program. If you have any questions about the program, please contact tarun@talaria.org.

Sincerely,

Tarundeep Kaur
Program Director

[Talaria Summer Institute](https://www.talaria.org)