



# Reaching for the Stars: How Research Experience Has Expanded the Scope of a High School Astronomy Club



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## Abstract

We participated in the NASA/IPAC Teacher Archive Research Program (NITARP) in 2023. Our La Jolla High School team worked with an astronomer from the California Institute of Technology and studied target regions from the Sharpless catalog to look for candidate young stellar objects. The research experience enables students to collaborate with peers, communicate results, and establish research skills not provided in a typical classroom setting.

## Community Outreach

The Astronomy and Astrophysics Club has grown from 4 members to 20+ members.

We have utilized Instagram (@ljhs.astroclub) to share content related to astronomy and reach out to other students, particularly from minority backgrounds, to pursue careers in Science, Technology, Engineering, and Math. The account is updated regularly, featuring reminders of upcoming meetings and our "Weekly Woman in STEM" posts, among other photos and videos of the Astro Club experience.

During Club Rush, we surveyed students and community members through our Instagram page on their perceptions of the Club. Nineteen people participated in this anonymous survey. The results indicate that 100% of survey participants agreed or strongly agreed that the Club provides opportunities not typically available within the regular LJHS science classes, values diversity, is a fun club, and encourages interest in science. Only one participant disagreed that the Club should utilize social media to educate the LJHS community on their activities.

## Club Activities

Because we participated in a 2023 NITARP team, we were able to expose other students at La Jolla High School to science disciplines beyond the general science courses available.

As we participated in NITARP, we were inspired to look into several other NASA programs for our Club. We participated in NASA's Exoplanet Exploration research program. We are currently participating in the 2024 NASA Drop Tower Challenge with the Glenn Research center. We used a 1970s Edmund Scientific Astroscan telescope (4 1/8") to observe the sky by eye. Students got to learn more about the sky beyond typical classroom instruction.

As a result of our experiences, the club now hosts Question Days, during which members exchange ideas and spend time looking for answers to various questions about astronomy, expanding their knowledge of outer space.

