

ALUMNI SPOTLIGHT

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Mohnish Alishala

**Class of 2023 | B.S. Human Biology | Challenger Journal Volume 4 Author | High School Science Teacher
Future Medical Student**

While earning his B.S. in Human Biology at UC San Diego, Mohnish Alishala found his interest in science communication, where he was able to combine his passions for the sciences and teaching. His experiences providing medical care to underserved populations with the International Health Collective, mentorship as a freelance Biology and Chemistry tutor and undergraduate instructional assistant, and exploration into the biological sciences as a Sanford Burnham Prebys lab intern have led him to be a high school science teacher and future medical student.

As an undergraduate student, Alishala found that he wanted to make an impact on the current healthcare landscape outside of the classroom and joined the International Health Collective. This organization is based at UC San Diego and aims to battle health disparities between the San Diego and Tijuana international border communities through a variety of community-building programs. As the Director of Community Health, Alishala became responsible for the coordination of health education workshops; in this role, he created educational workshops and resources on chronic conditions, such as diabetes and hypertension and helped patients in the area be more knowledgeable about their diagnosis, aiming to prevent other prevalent health conditions. Alishala's ability to make tangible health education impacts on this community piqued his interest in teaching, and reinforced his desire to pursue a career in medicine. He continues to be active in the organization today as President, where his main priority lies in optimizing the organization's administration so both volunteers and patients can have a smoother and more fulfilling experience.

Alishala was also involved in laboratory research while pursuing his B.S. with Professor Christopher Glass, which he was able to publish in Volume 4 of the Challenger Research Journal. His paper titled "Use of CRISPR/Cas9 Gene Editing Methods to Investigate the Mechanism of Trem2-Dependent Gene Expression in Macrophages" explored the types of immune responses associated with Alzheimer's disease, liver fibrosis, and metabolic syndrome. This background in traditional wet lab research not only provided a new way of exploring his Human Biology major, but also increased insight into the efforts being made in biology and biotechnology research.

When graduating from UC San Diego, Alishala knew he wanted to take a gap year before applying to medical school, but none of the traditional gap year options aligned with his previous experiences and interests in science communications. He thus decided to find a job that combined his passion in community outreach, natural sciences, and education, eventually becoming a high school science teacher. In this role, he educates students on freshman-level and Advanced Placement (AP) Biology and Chemistry. Although the working hours can be long and the grading can be tedious, he notes that teaching has been a fulfilling career, especially for his AP Biology students. The course material ranges from more detailed biological mechanisms to the social implications of biological findings; Alishala's wide variety of experiences serves as a strong foundation to fuel his students' curious minds. In turn, Alishala was able to build his science communication skills by breaking down large complex topics into smaller, more digestible content. He notes this skill will be extremely useful during his training as a medical student this fall and can translate to how he communicates treatment plans or diagnoses to patients.

For students looking for a path toward medical school, Alishala recommends that students not be so harsh on themselves and find experiences that speak to them personally. It is easy to compare GPAs, number of extracurriculars, or any other stats and have them serve as a benchmark value, but that is often not an indicator of a successful or fulfilled applicant. He believes that as long as students try their best, they should be proud of their achievements, no matter the outcome.