

Merging Science and Service by Treating Blind Children

The program: MISTI-Global Classroom is a 2-3 week program where MIT students travel abroad with faculty to explore and understand a subject through hands-on, immersive, on-the-ground learning.

MISTI-India conducted a global classroom in January 2026, through which 12 MIT undergraduates traveled to India to learn about a unique model of combining humanitarian service with cutting-edge neuroscience research. Led by **Prof. Pawan Sinha** from the department of Brain and Cognitive Sciences, students engaged with **Project Prakash**, a pioneering initiative that restores sight to congenitally blind children while advancing fundamental understanding of visual development and brain plasticity.



Over two weeks, students had the opportunity to directly observe multiple facets of the project. They participated in rural outreach through a screening camp, and helped assess 65+ potential candidates for sight-restoring surgery; observed live cataract surgeries via CCTV feed and witnessed bandage opening; learned about scientific research through EEGs, fMRIs, visual and behavioral assessments; and visited organizations that provide post-treatment rehabilitation and education, such as the Blind Relief Association and National Association for the Blind. The biggest highlight, however, was interacting closely- playing and making art with several congenitally blind children who underwent surgery and gained sight during the Global Classroom.



Beyond the clinical experience, students engaged in rich cultural immersion- visiting historic and heritage sites in Delhi and Agra such as the Taj Mahal; experienced university life firsthand by staying on the IIT Delhi campus; celebrated Lohri festival with the IIT Delhi community and connected with MIT alumni based in Delhi, gaining insights into India's social fabric, academic culture, and thriving innovation ecosystem.

Through this immersion, students saw a powerful model of how to implement MIT's ethos- bringing about real world change while advancing fundamental science.



In students' own words:

“Being in the blooming, buzzing confusion that is India, has been one of the best experiences I've had throughout my time at MIT. The trip was truly special and inspired me every single day. I've been thinking about the message that it is our duty to help the world somehow. I don't know how yet, but this trip was the first time I believed I could ”. – Maria Santos, ‘27

"Observing this integrated model of science, medical care, service, and education showed me exactly the type of direction I would like to pursue for my career. It taught me that science and service can go hand in hand and that pursuing a career in science does not limit the scope of my work to the Western world ”.
– Diya Ramesh, ‘27

“Beyond the scheduled programming, we were immersed in the rich history and culture of Northern India. Whether tasting panipuris, admiring the Taj Mahal, or haggling in markets across Delhi, each experience presented a snapshot of the great tapestry that is India. In the end, this Global Classroom became a powerful intersection of research, service, and cultural immersion. It reshaped how I see the world and reaffirmed why I am drawn to medicine and service, leaving an impact on me that continues to grow as I continue to reflect on this extraordinary experience.”- Avner Romero Rodriguez, ‘28

