

Outreach Report 24-25

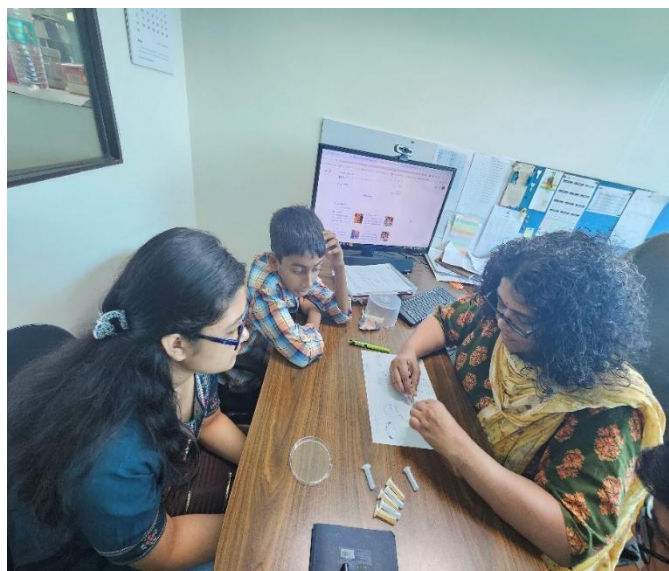
Outreach 2024-2025

The IGIB outreach program aims to inspire curiosity and passion for science among students by providing hands-on experiments, facility tours, and interactions with researchers. Approximately 3000 students participated in the outreach events of IGIB from March 2024 to March 2025. Students from more than 40 schools and more than 20 colleges visited were part of our outreach programs both off-campus and on-campus. Apart from the usual outreach visits, academic year 24-25 saw multiple new initiatives by IGIB outreach team. Through immersive activities like Lab@Home, Shadow-a-Scientist, and open courses, the program fosters scientific aptitude, nurtures budding talent, and bridges academia with real-world research experiences. 120 students from MERI College visited IGIB Mathura Road on 15th March. Ajay Pratap Singh and Kumardeep Chaudhury introduced students to computational biology and its applications in genomics. A group of students from Prakriti School, Manav Rachna University, and Acharya Narendra Dev College visited IGIB on 12th April. Students from Prakriti School were given Lab@Home kits to isolate DNA and introduced to basic concepts of DNA and Gel Electrophoresis. College students were given a tour of the institute, followed by talks. An energetic group of students from Delhi Public School, Raj Nagar Extension, and Sapphire International Public School visited the IGIB campus on 10th May and toured the Zebrafish and Transmission Electron Microscope facilities.



Ramanujan Hardy Lab & Shadow-a-Scientist Programs

IGIB hosted the first Ramanujan Hardy lab student from Teleri Rabindra Siksha Niketan High School, chosen by our Mentor, Samir K Brahmachari. She stayed on the IGIB campus for 15 days in June, having an immersive experience talking to the scientists and researchers. She also took up a small project of DNA isolation and amplification of multiple species of plants and animals in and around the campus. This program also ran in parallel with the Shadow-a-scientist program, where we hosted two other students from 23rd May to 15th June 2024. Five students from Nirmal Bhartia School were enrolled in an outreach Summer Internship program with Beena Pillai, Vivek Rao, and Rakesh Sharma from 18th June to 2nd July. We did extensive outreach visits to schools in Kerala and Karnataka in June, where we conducted Lab@Home experiments with around 400 students.





Another novel initiative was adding inclusivity to our outreach theme, by reaching out to blind students. An interactive outreach session was carried out at Olassa Blind School, the only high school for blind students in Kerala. 3D models of DNA were used to help blind students understand its structure and function. Outreach visits to IGIB resumed in August, and we hosted Hindu College, University of Delhi students at the Mall Road campus. Students visited the behavioral lab and Genomics facility and interacted with the researchers. Students also listened to a talk by Krishnendu Chakraborty on Acute Respiratory Distress Syndrome (ARDS). A group of Pharmacy students from K R Mangalam University visited IGIB as a part of their field visit on 27th September at the Mall Road Campus. They were given an introduction to the Next Generation Sequencing facility on campus. The Annual Open Day was held on 30th September, and around 1500 school and college students visited the labs and other facilities of IGIB. We interacted with the school and college students through games, puzzles, and setting creative stalls to explain the research at IGIB. We were happy to host a selected group of students from the Knowledge and Awareness Mapping Platform (KAMP) to instill curiosity in science to the budding scientists. In October, students from Delhi University (multiple colleges) visited IGIB as a part of an open course to interact with scientists and reconnect for internship opportunities.



Science Aptitude Assessment Event @IGIB

A 'scientific aptitude assessment' was undertaken by CSIR in its constituent laboratories across the country on December 20, 2024. CSIR- IGIB coordinated the activity by connecting virtually to all the other laboratories, concurrently. The event was inaugurated by Dr. Souvik Maiti, Director- IGIB, in the presence of Dr. Geethavani Rayasam (Head, CSIR- HRDG), senior scientists from various CSIR institutes, teachers, and school students. Jigyasa project coordinators and student volunteers, biologists, chemists, physicists and engineers alike, performed the experiments with the students. The activity was designed to introduce children of class 9 to the concept of DNA and genes. In line with previous Lab@Home sessions conducted by IGIB scientists, at each CSIR laboratory, 30 children were provided with personal kits containing chemicals for isolating DNA from their saliva. The exercise was purely educational, and the DNA samples were not retained for any type of research. Through this activity, students were also informed about the scientific principles of cell structure and the chemical nature of DNA. Finally, the students were given a short questionnaire designed to evaluate their understanding of these principles, and their ability to connect the information gained from textbooks, to practical activities. Around 870 students performed this experiment either online or offline, after watching a video explaining the science behind the experiment



A small group of students from the Kerala University of Fisheries and Ocean Studies visited us on 30th December 2024, marking our final outreach visit for the year 2024 before we paused visits for the next two months in 2025. We hosted a group of students from Government College for Women, Jammu on 22-23 March 2025 for a scientific visit at our Mathura Road Campus. This visit marks the end of the outreach activities for 2024-25 academic year.



