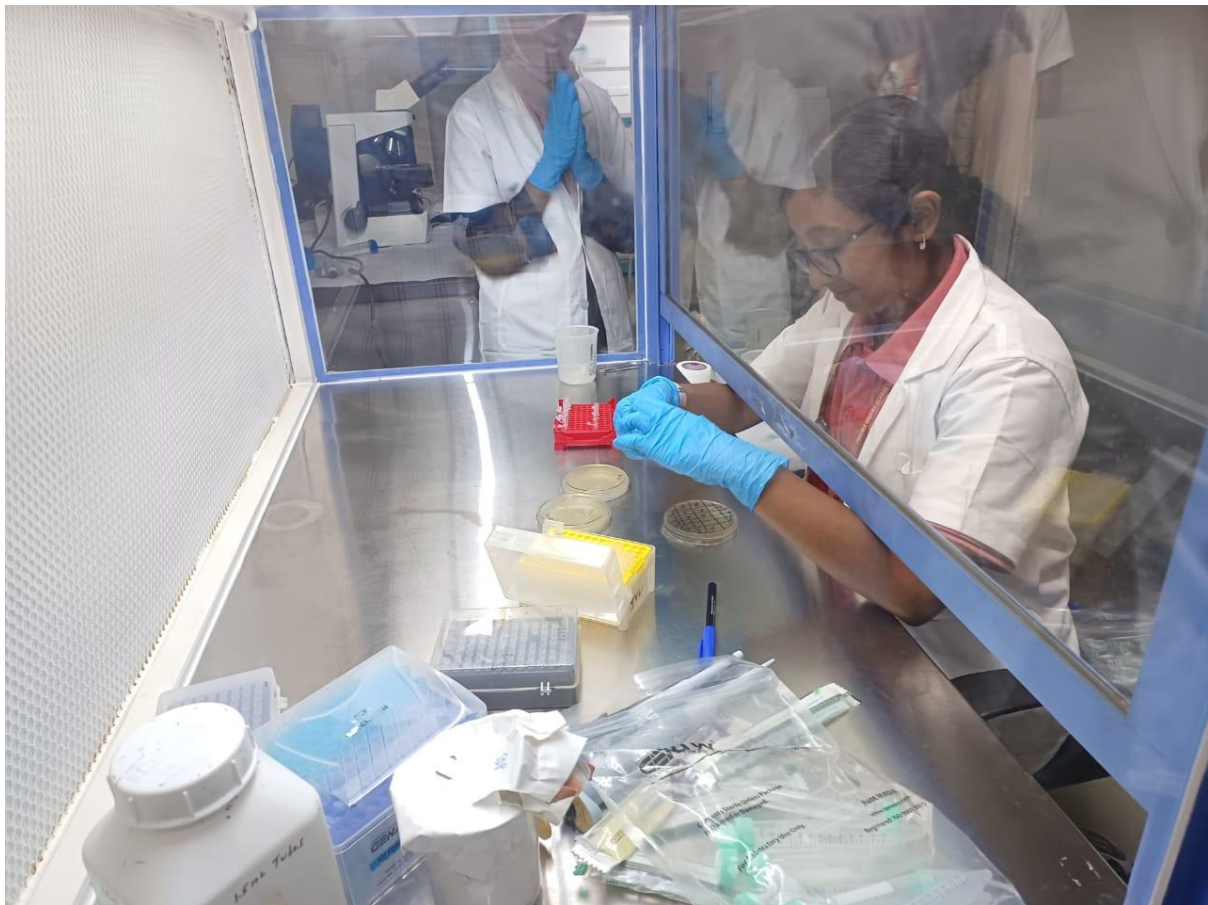




High schoolers become gene cloners at CCMB

Hyderabad, 3rd Jan, 2026: We live in the era of biotechnology. And, one of the core biotech tools is gene cloning. It refers to take a piece of DNA from one organism and insert it into another's cells. While tools like these shape modern healthcare and agriculture, a very select population in the world understand how these tools function. This makes the overall citizenry both unaware and fearful of the technologies.

In this direction, CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad has demonstrated for the first time that even 8-10th grade students can be taught to clone genes. This was done as a part of the Young Innovators Program, CCMB's flagship outreach program for high school students. "Every year we select 25-30 high school students through a competitive exam and allow them to spend time in our labs for about a week and observe how different research tools are used. But this year, they actually were taught and asked to clone a gene under supervision of our PhD students," said Dr Aditya Undru, coordinator of the program at CCMB. This year's program had 26 students, from Hyderabad, Peddapalli and Hanamkonda, and ran from 23 Dec, 2025 to 2 Jan, 2026.



“These are the kinds of experiments that most students don’t even get to do in their postgraduate studies. Otherwise students only study these theoretically and don’t have much avenues to practically experience it,” said Mrs Vasudha Ramireddy, biology teacher at St Andrews High School, Suchitra, Bowenpally, Secunderabad.

Access to skill development labs where outsiders can come, learn and work, availability of reagents for training purposes and trained personnel at CCMB enabled such a training program. “This year’s Young Innovators Program was a chance for us to show that far younger people can now start thinking about and doing molecular biology experiments, given the appropriate guidance and resources. In the current world, where biotech is all around us, it is time that more and more people actually start understanding the working of these tools. We now want to start doing similar workshops for teachers and journalists too, in our pursuit to make a more biotech-aware society,” said Dr Somdatta Karak, head, Science Communication and Public Outreach at CCMB. This program has been supported by the Council for Scientific and Industrial Research’s Jigyasa program.