

Cell Repository

NCCS has been serving as a National Cell Repository for cell lines in India. The cell repository manages the expansion, cryopreservation and distribution of cell lines to researchers in academia and government as well as private research institutions and industry in the country. In the year 2022-23, four thousand five hundred and two cell cultures have been provided to 2422 users in the country across five hundred thirty-two organizations. The repository also supplied one hundred and thirty cell cultures (including NCI cell lines) to scientists in NCCS. Moreover, the repository provides various types of cell culture media to in-house scientists and have supplied 334 litres in the reporting year. The services for cell line authentication by Short Tandem Repeat (STR) analysis and Mycoplasma testing have been given to both in-house scientists and external users. Efforts were undertaken to encourage scientists from NCCS and other organizations to deposit their indigenously developed or modified cell lines in cell repository. Work towards the establishment of cell lines from different human cancer tissues such as breast, liver, and lung has also been initiated.

The repository organized National hands-on training workshop on “Basic Cell Culture Technology” from February 20-23, 2023. Training for important cell culture practices related to cell line maintenance, expansion, cryopreservation, revival and other specialized techniques were included in the workshop. Early career researchers including doctoral students, young faculty and technical staff from academic and non-academic institutions from all over the country were selected and imparted training. A total of 20 participants (15 PhD Scholars, 2 Faculty, 3 Technical) from 20 below-mentioned institutes across the nation have been imparted training.

- ICAR- Central Institute of Fisheries Technology, Cochin, Kerala
- Central University of Karnataka, Kadaganchi, Karnataka
- CSIR-National Chemical Laboratory (CSIR-NCL), Pune, Maharashtra
- Tocklai Tea Research Institute, Cinnamora, Jorhat
- All India Institute of Medical Sciences, Kalyani, West Bengal
- Indian Institute of Science Education and Research (IISER), Bhopal Madhya Pradesh
- Savitribai Phule Pune University, Pune, Maharashtra
- Smt. Kasturbai Walchand College of Arts and Science, Sangli, Maharashtra
- D.Y. Patil Education Society Deemed to be University, Kolhapur, Maharashtra
- Indian Institute of Science Education and Research (IISER), Berhampur, Odisha
- Institute of Advanced Study in Science and Technology (IASST), Guwahati, Assam
- CETMS, Institute of Technical Education and Research Siksha ‘O’ Anusandhan, Dhenkanal, Odisha
- B.N. Sarda Science College, Sangamner, Maharashtra
- Parul University, Vadodara, Gujarat
- Venkateshwara Hatcheries Pvt. Ltd., Pune, Maharashtra
- MSJ Government PG College, Bharatpur, Rajasthan

- Institute of Veterinary Biological Products, Pune Maharashtra
- Banaras Hindu University, Varanasi, Uttar Pradesh
- B.P.H.E. Society's, Ahmednagar College, Ahmednagar, Maharashtra
- GITAM (Deemed to be University), Rushikonda, Visakhapatnam

The repository team participated in outreach programs such as Biotech Startup Expo 2022 from June 9-10, 2022 at New Delhi and India International Science Festival (IISF 2022) from January 21-24, 2023 at Bhopal. Besides out-reach event on National Science Day on February 28, 2023, visit of students from various institutes to cell repository was also arranged.

- Saraswati Vishwa Vidyalaya National School, Pune on August 22, 2022.
- Poona College, Pune on October 10, 2022.
- Shri Shivaji College of Agricultural Biotechnology, Amravati on December 6, 2022.
- Ramniranjan Jhunjhunwala College, Mumbai on December 14, 2022.
- Smt. Kasturbai Walchand College of Arts and Science, Sangli on March 29, 2023.

In all the events, information was provided regarding the importance and usage of cell lines in research along with the services of cell repository.