

Cell Repository

NCCS has been operating as the National Cell Repository in India, facilitating the expansion, cryopreservation, and distribution of cell lines to researchers across academia, government, private research institutions, and industry. In the 2023-24 fiscal year, we provided 4,526 cell cultures to 2,496 users from 549 organizations nationwide. Additionally, we have supplied 88 cell cultures to scientists at NCCS. We have also distributed 270 litres of various cell culture media to in-house researchers during this period. Our services include cell line authentication using Short Tandem Repeat (STR) analysis and Mycoplasma testing, available to both internal and external scientists. We have actively encouraged scientists from NCCS and other institutions to deposit their newly developed or modified cell lines into our repository. Efforts are underway to establish primary cells/cell lines from human normal/cancer tissues.

We conducted two National hands-on training workshops on "Basic Cell Culture Technology." The workshop covered crucial cell culture practices, including maintenance, expansion, cryopreservation, revival, and other specialized techniques. The workshop trained early-career researchers, including PhD students, young faculty, and technical staff from academic and non-academic institutions across the country. Twenty-two individuals (16 PhD scholars, 3 faculty members, and 3 technical staff) from 22 below-mentioned institutions were selected to participate in the training organized from May 8-11, 2023.

- University of Madras, Chennai, Tamil Nadu
- Sinhgad Dental College and Hospital, Pune, Maharashtra
- Manipal Academy of Higher Education, Udupi, Karnataka
- CSIR-IIMT, Bhubaneswar, Odisha
- Defence Food Research Laboratory (DFRL), Mysuru, Karnataka
- UPES, Dehradun, Uttarakhand
- BKL Walawalkar Hospital, Diagnostic and Research Centre, Chiplun, Maharashtra
- Institute of Nuclear Medicine & Allied Sciences (INMAS), New Delhi
- Indian Institute of Technology (BHU), Varanasi, Uttar Pradesh
- AIIMS, Raipur, Chhattisgarh
- Delhi Pharmaceutical Sciences and Research University, New Delhi
- D. Y. Patil Education Society, Kolhapur, Maharashtra
- Dibrugarh University, Dibrugarh, Assam
- PES Modern College of Arts, Science & Commerce, Pune, Maharashtra
- NGSM Institute of Pharmaceutical Sciences, Nitte, Mangalore, Karnataka
- JMF's ACPM Dental College and Hospital, Dhule, Maharashtra
- Bharathidasan University, Tiruchirappalli, Tamil Nadu
- Mahatma Gandhi University, Kottayam, Kerala

- Veer Narmad South Gujarat University, Surat, Gujarat
- C. U. Shah College of Pharmacy, Mumbai, Maharashtra
- Vellore Institute of Technology, Vellore, Tamil Nadu
- Dibrugarh University, Dibrugarh, Assam

In the training workshop arranged from November 6-9, 2023, twenty participants (18 PhD scholars, 1 faculty member, and 1 technical staff) from 17 institutes outlined below were selected for the training.

- Indian Institute of Technology, Dharwad, Karnataka
- Savitribai Phule Pune University, Pune, Maharashtra
- University of Mumbai, Mumbai, Maharashtra
- Indian Institute of Technology, Palakkad, Kerala
- National Institute of Technology, Warangal, Telangana
- Indian Institute of Technology (BHU), Varanasi, Uttar Pradesh
- National Centre for Cell Science, Pune, Maharashtra
- Central University of Tamil Nadu, Thiruvavur, Tamil Nadu
- Indian Institute of Technology, Madras, Chennai, Tamil Nadu
- Indian Institute of Science Education and Research, Bhopal, Madhya Pradesh
- Karnatak University, Dharwad, Karnataka
- Tezpur University, Sonitpur, Assam
- Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu
- Birla Institute of Technology and Science Pilani, Pilani, Rajasthan
- Institute of Nano Science and Technology, Mohali, Punjab
- University of Madras, Chennai, Tamil Nadu
- Indian Institute of Technology, Roorkee, Uttarakhand

We were also engaged in outreach programs, including the National Technology Day 2023 Expo (May 11-14, 2023 in New Delhi), Global Bio-India 2023 (December 4-6, 2023 in New Delhi), India International Science Festival (IISF 2023) (January 17-20, 2024 in Faridabad) and Shining Maharashtra Exhibition 2024 (February 19-21, 2024 in Phaltan). Besides out-reach programs for pre-IISF Open Day on January 3, 2024 and National Science Day on February 28, 2024, we hosted visits for diverse group of students from following institutes to Cell Repository.

- Nutan Marathi Vidyalaya, Pune on September 25, 2023
- Symbiosis International University, Pune on October 6, 2023
- ICAR-Central Institute of Fisheries Education, Mumbai on October 25, 2023
- Modern College, Pune & Johanna Wittum School, Pforzheim, Germany (under the German Exchange program - “Schools: Partners for the Future”) on October 30, 2023

- Kerala Agricultural University, Thiruvananthapuram on November 2, 2023
- Modern College, Pune on November 22, 2023
- V.E.S. College of Arts, Science and Commerce, Mumbai on December 7, 2023
- Students visit from Assam as part of the 'Yuva Sangam Phase III Cultural-Educational Visit under the PM's 'Ek Bharat Shrestha Bharat' campaign on January 23, 2024
- Fergusson College, Pune on March 27, 2024

At these events, we highlighted the importance and applications of cell lines in research and provided information about the services offered by Cell Repository.