Infrastructure for Translational Research & Clinical Trials in India

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NCR Health Biotech Cluster

Cluster (Governance) Board

UNESCO Regional Centre for Biotechnology (RCB)
- Education
- Research
- Technology Management & Enterprise Development

Bio-SPACe (Planned)
- Centralized Science & Technology Platform Unit

Translational Health Science and Technology Institute (THSTI)
- VIDRC
- CDSA
- Biodesign Centre
- Paediatric Biology Centre (PBC)

Other Cluster Partners:
- Nano Science Centre
- Animal Research Facility
- Biotechnology Business Incubator & Biotech Park

VIDRC: Vaccine and Infectious Disease Research Centre
CDSA: Clinical Development Services Agency
THSTI Niché Centres

VIDRC

PBC

Biodesign Centre

Microbial Meta-Genomics in Health & Disease

Centre for population based TR

UDSC

IAVI

SAS

UDSC

THSTI Extramural Centres

Bio-SPACe

THSTI Extramural Centres

CDSA

National Biodesign Alliance
AIMS & OBJECTIVES

- Provide cost effective, high quality preclinical and clinical product development support services to meet the country’s growing healthcare needs.
- Interact with enterprises, particularly SMEs involved in new technology innovation and facilitate translation of scientific know-how into viable products.
- Develop Centres of Excellence (CoE) in clinical research through partnerships with leading institutions conducting clinical trials in India.
- Provide comprehensive and sustained training in clinical research through these COE in order to build a cadre of world class investigators capable of conducting clinical trials for regulatory submissions.
Bangalore Biotech Cluster

- Institute for Stem Cell Biology and Regenerative Medicine (inSTEM)
  - A new collaborative venture of DBT, which is being nurtured at NCBS.
  - Encouraging the formation of collaborative teams to address key scientific problems in stem cell and regenerative biology.

- Centre for Cellular and Molecular Platforms (C–CAMP)
  - A DBT initiative, also housed at NCBS, C–CAMP is envisioned to be a major platform technology, industry–interaction and incubator unit.
  - Enabling success in bioscience research and entrepreneurship by providing research, development, training and service in state of the art technology platforms.
BSL Facilities

14 Facilities in Public Sector
6 more facilities planned
Indian Institute of Toxicology Research (CSIR) undertakes research in niche areas of Toxicology. These include the impact of industrial and environmental chemicals on human health and ecosystem, and environmental monitoring of pollutants in air, water and soil.

Indian Institute of Toxicology, Pune is an independent CRO specializing in conducting Toxicology studies for pharmaceutical, agrochemical, life sciences, dyes, chemical and biotechnology companies from India and abroad.

12 in Public Sector; 2 in Private Sector
Drug Testing Facilities

National Institute of Biologicals, Noida

Central Drug Research Institute (CDRI), Lucknow

AstraZeneca Research Institute, Bangalore

Hyderabad

Bangalore
National Animal Facilities

Primate Research Center, National Institute of Immunology (NII), New Delhi

National Institute of Nutrition, Hyderabad

National Centre for Non-human Primate Breeding & Research, Susnavgarh

CCMB, Hyderabad

Genome Valley, Hyderabad

National Institute of Cholera and Enteric Diseases (NICED), Kolkata
Biotech Parks in India

- Shapoorji Pallonji Biotech Park, Secunderabad
- Golden Jubilee Biotech Park for Women Society, Chennai
- Lucknow Biotech Park
- TIDCO Centre for Life Sciences (TICEL) Bio Park, Chennai
New Universities and Institutes

Central Universities
- 39 existing
- ~20 up–coming

IISERs
- Kolkata
- Trivandrum
- Pune
- Bhopal
- Mohali

NIPERs
- Ahmedabad
- Guwahati
- Hajipur
- Hyderabha
d
- Kolkata

New IITs
- Ahmedabad
- Guwahati
- Hajipur
- Hyderabha
d
- Kolkata

NIT
- Calicut
- Durgapura
Public Health Institutes

Asian Institute of Public Health

Institute of Public Health, Bangalore

IIPH, Hyderabad
IIPH, Gandhinagar
IIPH, Delhi
IIPH, Bhubaneswar

ICMR Schools of Public Health

Chennai
Kolkata
Pune
Clinical Trial (Phase-I) Facilities for Drugs and Vaccines

- National Institute of Cholera and Enteric Diseases (NICED), Kolkata
- National Institute for Research in Tuberculosis (NIRT)*, Chennai
- Vadu Rural Health Program, King Edward Medical (KEM) College and Hospital, Mumbai
- Postgraduate Institute of Medical Education and Research (PGI), Chandigarh
- Christian Medical College (CMC), Vellore
- Society for Applied Studies (SAS), Kolkata and New Delhi
- Medanta Duke Research Institute (MDRI) – A Joint venture partnership between Duke Medicine and Medanta Medicity in New Delhi – Early phase clinical site (upcoming)
- Quintiles & Apollo – Clinical Trials Unit at Hyderabad (upcoming)

* Formerly Tuberculosis Research Centre (TRC)
Major Vaccine & Drug Trials

- NICED-IVI / DOMI Collaborative Projects
  - Cholera Vaccine Trials, Kolkata, West Bengal
    - Bivalent (01 and 0139) killed, whole cell, oral cholera vaccine
  - Typhoid Vaccine Trials, Kolkata, West Bengal
    - Vi Polysaccharide Vaccine (Typherix®)

- HIV/AIDS Vaccine: Phase-I Clinical Trials
  - tg AACO9 HIV-1 Vaccine Phase 1 Trial, NARI, Pune
  - MVA Vaccine Trial, TRC, Chennai

- Rotavirus Vaccine Trial, New Delhi
  - Neonatal Strain 116E, human rotavirus Serotype G9, P with single gene coding VP4, isolated from AIIMS

- Measles Aerosol Vaccine Phase-I Trial

- Kala-azar: ICMR-DNDi VL Combo-07 Trial
Inauguration of BSL-3 Facility, National Institute of Virology, Pune

by
Hon’ble Former President of India, Dr. A.P.J. Abdul Kalam (1st Feb, 2005)

Thank You