

ICRI 2012

Infrastructure for Translational Research & Clinical Trials in India

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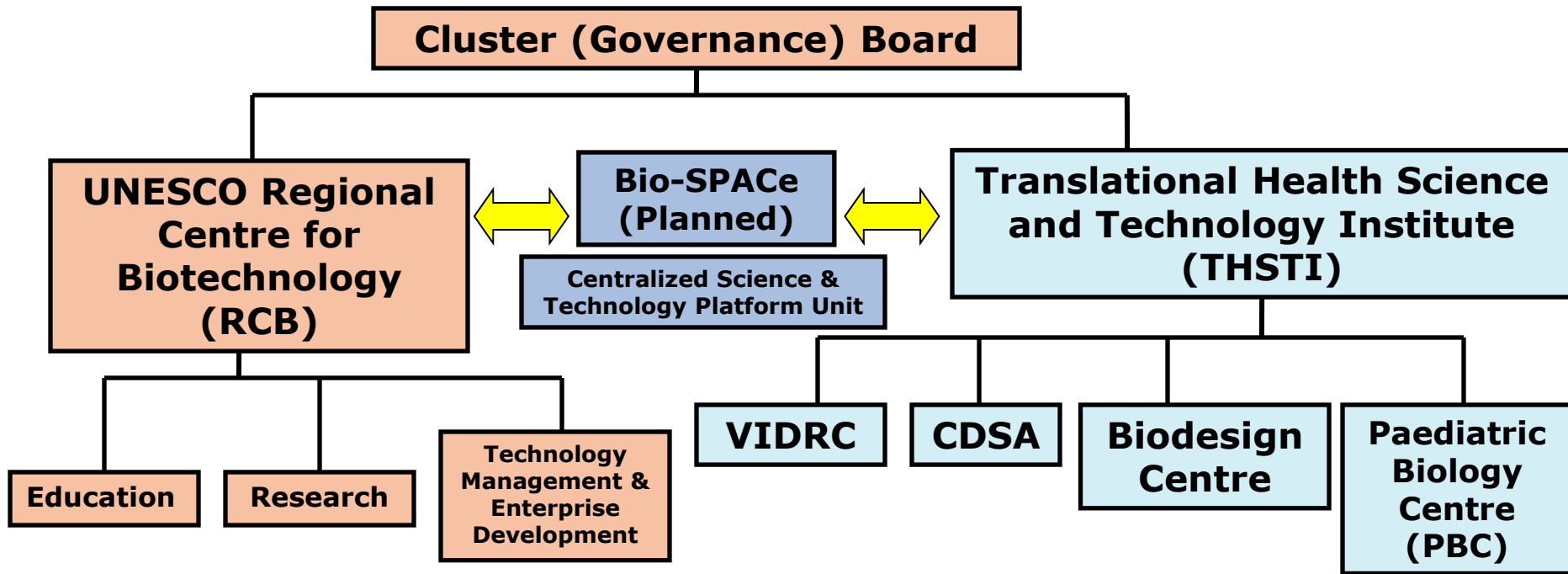
President – Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER)

Distinguished Biotechnology Research Professor

National Institute of Immunology, New Delhi, India



NCR Health Biotech Cluster



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

Centre for population
based TR

Biodesign
Centre

Microbial Meta-
Genomics in Health &
Disease

PBC

AIIMS

VIDRC

IAVI

SAS

UDSC

Bio-SPACe

THSTI Extramural Centres

CDSA

National Biodesign Alliance



Clinical Development Services Agency (CDSA) – Expediting Clinical Research

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**

Toxicology Facilities

12 in Public Sector; 2 in Private Sector



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.

Drug Testing Facilities



National Institute of Biologicals, Noida



**AstraZeneca Research Institute,
Bangalore**



**Central Drug Research
Institute (CDRI), Lucknow**



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**



**Genome Valley,
Hyderabad**



**National Institute of Cholera and
Enteric Diseases (NICED), Kolkata**

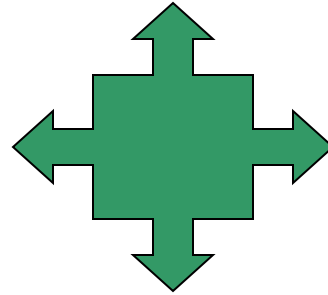
Biotech Parks in India



**Shapoorji Pallonji Biotech
Park, Secunderabad**



Lucknow Biotech Park



**Golden Jubilee Biotech Park
for Women Society, Chennai**



**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
- Hyderabad
- Kolkata

New IITs

NIT

- Calicut
- Durgapur

Public Health Institutes



Institute of Public Health, Bangalore



2 Centres of Excellence

4 Branches:

IIPH, Hyderabad

IIPH, Gandhinagar

IIPH, Delhi

IIPH, Bhubaneswar

ICMR Schools of Public Health



Chennai



Kolkata



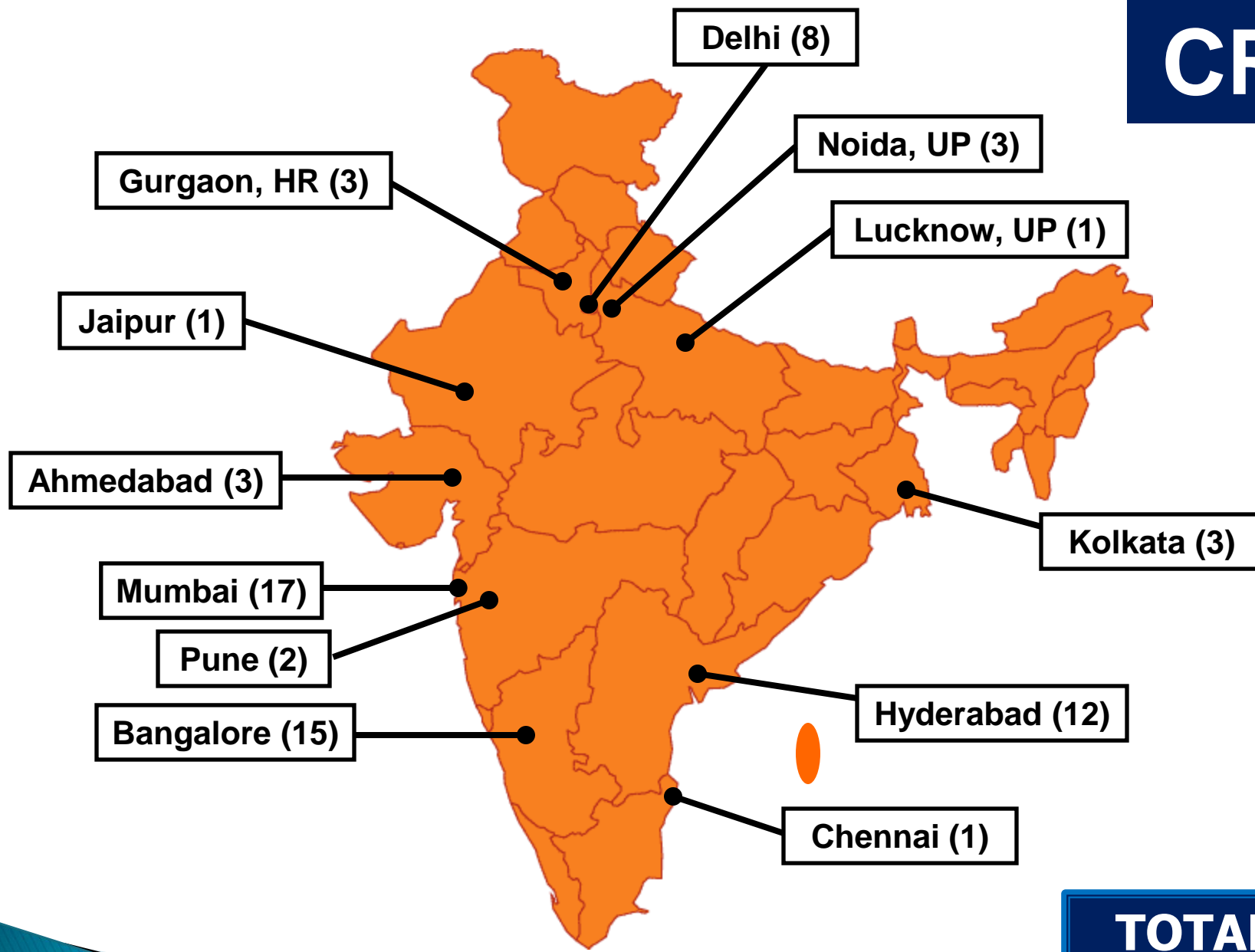
Pune

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 (up-coming)
- ▶ **Quintiles & Apollo** – Clinical Trials Unit at Hyderabad (up-coming)

* Formerly Tuberculosis Research Centre (TRC)

CROs



TOTAL : 69

UP: Uttar Pradesh; HR: Haryana

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