Translational Health Science & Technology Institute

An Autonomous Institute of Department of Biotechnology, Govt. of India

Annual Report
2009-2010

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Contents

1. Preamble

Translational Health Science and Technology Institute (THSTI) had come into existence on 15th July, 2009, as a Society registered under the Societies Registration Act of 1860. THSTI is an autonomous institution of Department of Biotechnology which is coming up as a part of the interdisciplinary Health Biotech Science cluster in Faridabad (Haryana). The buildings and laboratory designs for permanent campus at Faridabad have been prepared and approved by the Building Committee. The Phase-I of the campus development has been initiated. In the meanwhile, interim laboratory space has been acquired on rental basis at 496, Udyog Vihar Phase III, Gurgaon, in South of Delhi area.

The institute is being mentored by globally recognized National Institute of Immunology (NII) and the Harvard-MIT Division of Health Science and Technology (HM-HST). The THSTI is designed to be a dynamic and interactive organization with a mission to conduct innovative translational research and develop research collaborations across disciplines and professions to accelerate the development of concepts into tangible products to improve human health. The other members of the cluster include the Regional Center for Biotechnology (RCB) under the aegis of UNESCO and the NII with which THSTI will have seamless scientific collaboration to achieve the interdisciplinary expertise.

THSTI's research activities are currently focused in three broad areas, namely, vaccine and infectious diseases, paediatric biology, and bio design and diagnostics development. These activities are focused in the form of THSTI niche centers *viz.* the Vaccine and Infectious Disease Research Centre (VIDRC), the Paediatric Biology Centre (PBC) and the Centre for Bio design and Diagnostics (CBD). In addition to these niche centers, Clinical Development Services Agency (CDSA) has been established as an extra-mural centre of THSTI. CDSA will be the anchor for a National Network of Centres of Excellence (COE) that will strive to develop a cadre of investigators of global standard in regulatory product evaluations through

a comprehensive & sustained training program and create a support system for biotech product evaluation for products developed in India or licensed to India & being developed by public institutions or companies.

THSTI has developed several training and education programs for the purpose of human resource development such as short term training for the graduate students, training of doctoral students and post-doctoral training.

THSTI organizes scientific meetings and workshops as part of its continuing education program where experts in a given field are invited to give expert lectures and interact with other scientists. Two such meetings, organized by the Paediatric Biology Centre (PBC) of THSTI were “International Symposium on Protective Nutrients 2010” and “Understanding the Genomic Basis of Disease”.

While the VIDRC laboratories have become fully operational, PBC laboratories are in the process of becoming fully equipped. Process to rent a separate building for CDSA and CBD is also in progress. An informative web portal comprehensively describing programmes and activities of the Institute has been prepared and launched.

While forging ahead in order to bring accolades and acclaim to the envisioned Institute in the near future, I thankfully acknowledge active and unrelenting contributions from academic, administrative and technical staff of the institute, generous financial support from the Department of Biotechnology, Government of India, unmatched patronage from the institute’s Society and Governing body and sincere cooperation from other partner Institutions within the cluster and the country.

(Dinakar M. Salunke)
Executive Director

Place : Gurgaon
Dated : 23.02.2011

2. Translational Health Science & Technology Institute in Brief

2.1 Background

India has made major progress over recent years in acquiring competence and credibility in using most sophisticated cutting edge biotechnology tools to understand disease pathogenesis at molecular level. The country is today experiencing difficulty in translating the available domain knowledge in science and biomedicine to usable products because of lack of facilities where basic scientists, physician scientists, technologists, epidemiologists along with innovative companies will work together to facilitate development, optimization and evaluation of technologies for health.

Translational and clinical research is critical for creating innovative technologies, since basic research without this does not usually lead to creation of useable products. The initial process of converting scientific knowledge into a health technology requires an interdisciplinary effort in which engineers, biologists, chemists and clinical scientists, physicists material scientists work together as a team, a situation that is often difficult to create in our existing department based university and individualised science institute work environment. Translation research follows a comprehensive set of steps including identification of socially or market relevant product related research needs, product characteristics suitable for diffusion, translational phase including animal research to generate proof of principle that may eventually lead to possible product development and clinical evaluation. The insights for translational science arise from background science knowledge, disease epidemiology and disease pathogenesis and through commissioned analysis of technology and product needs, product design, policy, economic analysis, knowledge of regulatory requirements scale up facilities, the marketability and public health diffusion. This requires institutional structures with so called ‘cradle to grave’ abilities and facilities and an interdisciplinary work force.

2.2 Mandate of the Institute

The THSTI is designed to be a dynamic and interactive organization with a mission to conduct innovative translational research and develop research collaborations across disciplines and professions to accelerate the development of concepts into tangible products to improve human health.

The THSTI will facilitate development, optimization and evaluation of technologies for public health and individual health as an independent interdisciplinary centre where basic scientists, physician scientists, technologists and chemical-epidemiologists would work together. The key feature of THSTI would be a dynamic inter-relationship of health, science and technology sectors and with small and medium biotech industry pursuing great challenges in public health to produce affordable technologies through group excellence.

The THSTI will have two components, one dealing with high end health science technology creation and the other extramural unit dealing with downstream translational issues such as toxicology, clinical trial, validated assay facility, validated data management. The Public Private Partnership of the high tech component will be through collaborative projects, with the objective to bring together different skills of public science and industry scale of skills.

2.2.1 Mission

The mission of the THSTI is to integrate the fields of medicine, science, engineering and technology into translational knowledge, and making the biomedical innovations accessible to public health, to improve the health of the most disadvantaged people in India and throughout the world.

2.2.2 Vision

As a networked organization linking many centers of excellence, THSTI is envisioned as a collective of scientists, engineers and physicians that will effectively enhance the quality of human life through integrating a culture of shared excellence in research, education and translational knowledge with the entrepreneurial spirit to take technologies into the public sphere. In fulfilment of its vision, the THSTI will work with other constituents of the technology cluster at Faridabad, such as the Regional Centre for Biotechnology (RCB) through long term partnerships.

2.2.3 Aims & Objectives

The Institute shall carry out major research and development functions within the overall goals and framework focused on health related biotechnologies. The specific aims and objectives would be –

- To support and create a network of scientific collaboration and research resource centres, to provide seed funds for novel translational work facilitated by a separate evaluation process. The research resource centres shall be given core support.

- To develop, de-novo or by acquisition of early leads generated by others, new and improved vaccines, adjuvants, bio-therapeutic products, bio-diagnostics and biomarkers, nutraceuticals, delivery systems for drugs and vaccines and cell based technologies.

- To identify technologies that are relevant to primary, secondary and tertiary health care, irrespective of the source of development, optimize them and facilitate their diffusion. Support would be provided for scale up, validation and commercialization of

the relevant technologies developed by other institutions and Small Medium Enterprises (SMEs), internationally developed technologies provided, the technology is licensed to an Indian company with whom the Institute can partner.

- To make the Institute's lab space accessible to researchers of small and medium companies on a user charge basis and to other extramural scientists but for translational purpose. These facilities may be in terms of developing novel and validated assays for product evaluation, clinical trial design and coordination, regulatory and IPR support, product design and refinement services access to platform technologies i.e. genomics, proteomics, imaging, NMR, chemical and molecular libraries, BSL3 and others.

- To coordinate inter-institutional translational research such as cohort and molecular ecology studies for understanding the molecular mechanisms of disease molecular genetics. The knowledge generated by these studies will complement the technology development process and development of intervention.

- To develop a centralized core equipment facility to be available on user charge basis to other institutes and SMEs.

- To achieve the above, to recruit a unique faculty with basic scientists, technologists, physician researchers, engineers, statisticians, bio-informaticians to work under one roof.

- To set up a unit for developing policies related to Health Science Technologies, identify needs, facilitate conceptualization and design of new technologies and product. This unit will create ready to use ideas and grand challenges for CSIR

laboratories, ICMR, DST, SMEs and for programmes of DBT and its autonomous institutions. The unit will be funded from the budget of the translational centre but be manned only by contract appointees.

- To initiate Masters/Fellowship course in Translational Health Science, interdisciplinary Ph.D. programme for physician scientists, short term training for SMEs and other professionals in product development, in regulation and IPR management and to support the activity in other medical schools in India.

- To provide platform for active interaction among scientists, health specialist, technologists and entrepreneur both nationally and internationally.

2.3 Governance Structure

2.3.1 Society

The Government of India had nominated Prof. G. Padmanaban as the President of the Society. The affairs of the Institute will be managed by its Governing Body, the Finance Committee, the Scientific Advisory Committee and the Technical Advisory Boards of various Centers.

2.3.2 Governing Body

The administrative, technical and financial management of the Institute shall vest in its Governing Body. The Governing Body would review and monitor the activities and suggest remedial measures as deemed fit to meet the aims and objectives of the Institute. The Governing Body shall meet at least twice a year. The Governing Body will be chaired by the Secretary, DBT (ex-officio) with DG-ICMR, Director-NII, JS&FA-DBT, Advisor (MB)-DBT, Directors of the Cluster Institutions,

Deans of the Institute and Executive Director as ex-officio members with up to 10 Scientists/Engineers/Medical Experts including from industry to be nominated by the Chairman, Governing Body, on the recommendations of the Executive Director of the Institute.

2.3.3 Finance Committee

The Institute will have a Finance Committee which will consider financial matters and make its recommendations to the Governing Body. The Finance Committee will be chaired by the Chairman, Governing Body with JS&FA-DBT, Executive Director-THSTI, Advisor (MB)-DBT and all the Deans of the Institute as ex-officio members. The Administrative Officer of the Institute will function as Non-Member Secretary and Convener.

2.3.4 Scientific Advisory Committee

The Scientific Advisory Committee shall evolve the scientific and technical programmes of the Institute, review them periodically and shall take further course of action as would be deemed fit for the Institute. The recommendations of the Committee would be submitted to the Governing Body for approval. It should meet at least once a year. The tenure of the Committee shall ordinarily be for a period of 3 years, which can be extended or reconstituted by the Governing Body after 3 years. It will be chaired by a renowned and distinguished scientist in areas of development, optimization and evaluation of technologies for public health and interdisciplinary research for translation of technologies for public health, to be nominated by the Chairman, Governing Body, with a representative each from DBT, ICMR, Industry as Members, all the Deans of the Institute and the Executive Director-THSTI as ex-officio members. Five distinguished Scientists/Medical Biotechnologist to be nominated as members by the Chairman, Governing Body, on the recommendations of the Executive Director and the Deans of the Institute.

3. Research and Academic Programmes

3.1 Research Programs

THSTI's research activities are currently focused in three broad areas, namely, vaccine and infectious diseases, paediatric biology, and bio-design and diagnostics development. These activities are focused in the form of THSTI niche centers *viz.* the Vaccine and Infectious Disease Research Centre (VIDRC), the Paediatric Biology Centre (PBC) and the Centre for Bio-design and in-vitro Diagnostics (CBD). In addition to these niche centers, Clinical Development Services Agency (CDSA) has been established as an extra-mural centre of THSTI.

3.1.1 Vaccine and Infectious Disease Research Centre (VIDRC)

VIDRC conducts basic and clinical research to advance translatable knowledge to develop novel vaccines and biologics. It uses modern biology approaches such as systems and synthetic biology, microarray technology in conjunction with genomics, proteomics, and bioinformatics to define and identify novel vaccine antigens for diseases prevalent in India. The center would develop novel vaccine technologies in the form of new adjuvants and vaccine delivery systems.

VIDRC research would have focus on infectious disease biology, development of animal models, natural history of disease in population giving new insight into protective host responses and biomarker discovery for screening vaccine candidates, thus fulfilling the requirement of a scientific milieu for novel vaccine development.

3.1.2 Paediatric Biology Centre (PBC)

The overall goals and objectives of PBC is to translate mechanistic

& causal understanding into development of robust sustainable interventions critical for public health policies in reducing neonatal & child morbidity & mortality. This will be achieved by bridging the gap between clinical and population epidemiology and mechanistic biology in a targeted approach to child health solutions. The unique mandate of the center will be that biologists, physician scientists, epidemiologists and technologists will work together to evolve these innovative intervention strategies on a sound, more rigorous understanding of underlying biology. The immediate core domains of the research program will try to understand the complex molecular cellular causality of childhood infections particularly with reference to host responses, and other childhood diseases, and generate hypotheses that will be tested rigorously. The emphasis will also be on developing inexpensive point of care diagnostic tests that can be made available at small hospitals and health facilities all over the country.

3.1.3 Centre for Bio-design and in-vitro Diagnostics (CBD)

The overall mission of the Centre for Bio design and in-vitro Diagnostics is to create medical technology innovation in India for affordable health care & to support services that extend from strategic bench work to commercialization. The overall objectives are to promote science and application related to affordable implants, devices, in-vitro diagnostics and imaging. The Center will develop world class quality science in platform technologies for use in in-vitro diagnosis and for implants and devices and the major emphasis will be to develop low cost, high quality indigenous implants and devices. A Bio design Alliance consisting of National and International partners will be created with THSTI being the anchor institute. The Central Advisory Board consisting of 5 scientific members including international scientists, Directors of partner institutes and Secretary DBT as Chair will be the Apex

Body. There will be separate Executive Management Committees for Implants and Devices and in-vitro diagnostics consisting of partner institutions with the administrative & financial secretariat at THSTI.

3.1.4 Clinical Development Services Agency (CDSA)

CDSA will be established as an extra mural unit of THSTI. The primary objective will be to develop a cadre of investigators of global standard in regulatory product evaluations through a comprehensive & sustained training program. It will create a support system for biotech product evaluation for products developed in India or licensed to India & being developed by public institutions or companies. This will be achieved by establishing a National Network of Centres of Excellence (COE) for conducting clinical trials for regulatory submissions and for assisting in the training program. CDSA will function as an anchor for this network. The Apex Body is the Board of Governors and the administrative and financial responsibilities will be with the Management and the Administrative Approval Committees.

3.2 Training and Education

THSTI has developed several training and education programs for the purpose of human resource development. These are listed below.

3.2.1 Short term training for the graduate students

THSTI receives a large number of applications for undertaking 6-12 month project training for young students working towards their graduate degree programs. Depending upon the availability of resources such students are accommodated to work at THSTI for 6-12 months duration under the mentorship of its faculty members. Following students received training at THSTI.

Pranshu Sahgal	B.Tech. (Biotechnology)	VIT University, Vellore
Deepa Nair	M.Tech. (Biotechnology)	Amity University, Noida
Sakshi Bhardwaj	B.Tech. (Biotechnology)	Ambala College of Engg.
Pooja Rohilla	M.Sc. (Biotechnology)	Kurukshetra University
Anshu Bhardwaj	B.Tech. (Genetic Engg)	SRM University, Chennai

3.2.2 Training of Doctoral students

THSTI has begun to accept Junior Research Fellows (JRF) of the DBT, CSIR, ICMR and UGC to undertake research work leading to the PhD degree. Selection for these positions is through an all-India advertisement. Only those who have qualified the JRF exam of DBT, CSIR, ICMR and UGC are eligible. Final selection is based on the interview of the eligible candidates. These students work under the mentorship of THSTI faculty. THSTI have the following PhD students:

Ms. Preeti Thakur	DBT JRF
Ms. Bhavya Khullar	CSIR JRF
Ms. Minu Nain	CSIR JRF
Sh. Manish Sharma	UGC JRF
Sh. Saurabh Gayali	CSIR JRF
Sh. Nishant Sharma	UGC JRF

3.2.3 Post-doctoral training

THSTI has created 'Vaccine Research Innovation (VRI) Awards' for young investigators having brilliant research accomplishments with

a monthly stipend of Rs 40,000/- . This is a career oriented scheme to identify and mentor outstanding young scientists with innovative ideas and desirous of pursuing research in areas related to vaccine and infectious diseases. The young scientists below the age of 35 years are considered for this award. Selected awardees work under the mentorship of THSTI faculty. The award is analogous to the 'Innovative Young Biotechnologist Award' of the Department of Biotechnology and the 'Young Investigator Award' of the Regional Centre for Biotechnology (RCB). Candidates having PhD degree with excellent academic record and high impact publications/patents are considered for the award. Duration of the award is three years extendable for another two years based on rigorous review of performance. Dr. Tanvi Agarwal selected as VRI awardee has since joined.

3.3. Scientific meetings / workshops

THSTI organizes scientific meetings and workshops as part of its continuing education program where experts in a given field are invited to give expert lectures and interact with other scientists. The following two such meetings were organized by the Paediatric Biology Centre (PBC) of THSTI.

3.3.1 *International Symposium on Protective Nutrients 2010*

This meeting brought together international and domestic researchers with the objectives to review the current understanding of mechanisms of protective nutrients, the non-classical beneficial actions of traditional minerals available and the clinical evidence for their use. This review was used to formulate specific research questions on modifying outcomes like immunity to infection, immune-responses to vaccines etc. using the identified nutrients as interventions. The symposium was an excellent educational activity for faculty from medical colleges and students from biological sciences.

3.3.2 *Understanding the Genomic Basis of Disease*

The overall objective of this meeting was to initiate a cross-talk between clinicians and biologists to discuss broad principles and designs of studies for understanding the genomic basis of disease and responses to vaccines. The specific objectives were to discuss the opportunities and approach to such studies, specific study designs and the people and skills required.

3.4. Publications

Appaiahgari M.B., and **Vrati, S.** (2010) IMOJEV® : a Yellow Fever virus-based novel Japanese encephalitis vaccine. ***Expert Review of Vaccines*** 9 : 1371-1384.

Anantpadma, M., Stein, D.A., **Vrati, S.** (2010) Inhibition of Japanese encephalitis virus replication in cultured cells and mice by a peptide-conjugated morpholino oligomer. ***Journal of Antimicrobial Chemotherpay*** 65 : 953-961.

Bhandari, N., Sharma, P., Taneja, S., Kumar, T., Rongsen-Chandola, T., Appaiahgari, M.B., Mishra, A., Singh, S., **Vrati, S.**; Rotavirus Vaccine Development Group (2009) A Dose-Escalation Safety and Immunogenicity Study of Live Attenuated Oral Rotavirus Vaccine 116E in Infants: A Randomized, Double-Blind, Placebo-Controlled Trial. ***Journal of Infectious Diseases*** 200 : 421-429.

Appaiahgari, M.B., Abdin, M.Z., Bansal, K.C., **Vrati, S.** (2009) Expression of Japanese encephalitis virus envelope protein in transgenic tobacco plants. ***Journal of Virological Methods*** 162 : 22-29.

4. Recruitment of academic and support staff

Positions of Administrative Officers, Section Officer, Technical and Senior

Technical Officer and Programmer have been filled following the nationally advertised search process. A number of support staff have been hired as an outsourced manpower. Advertisements for the scientific positions were made internationally in reputed science journals such as the Nature and the Science. The following faculty appointments were made at THSTI.

Dr. Sudhanshu Vrati	Dean
Dr. Shinjini Bhatnagar	Professor
Dr. Guruprasad Medigeshi	Assistant Professor
Dr. Ramandeep Singh	Assistant Professor
Dr. Nisheeth Agarwal	Assistant Professor
Dr. Manjula Kalia	Research Scientist D
Dr. Shailja Sopory	Research Scientist D
Dr. Nitya Wadhava	Research Scientist D
Dr. Sankar Bhattacharya	Research Scientist C
Dr. Mohan Babu Appaiahgari	Research Scientist C
Dr. Aditi Sinha	Research Scientist C

5. Interim facilities and construction of permanent building

THSTI laboratories are functioning from an interim facility located in Gurgaon. However, THSTI campus is under development in Faridabad in the Biotech Science Cluster. Details of these various facilities are provided below.

5.1 Interim building

A building with approx. 25000 sft space has been acquired on rental basis in Gurgaon where interim laboratories of the institute have become operational. The laboratories are fully air conditioned and have 100% power back up.

5.2 THSTI building in Faridabad

The permanent campus of THSTI is coming up in the Biotech Science Cluster (BSC) being set up by the Department of Biotechnology (DBT), Govt. of India in the NCR Delhi at Faridabad (Haryana) on a 200 acre plot of land. The other major Institution within the Cluster is the Regional Centre for Biotechnology (RCB). A number of other related centers to be co-located at the cluster are at conceptual stage. The Cluster will facilitate synergizing high value resources and infrastructure, coordinated development and maximize societal benefits.

A firm of Architects M/s. Suresh Goel & Associates engaged for planning, design and execution of building works, services and other facilities has prepared layout plans and schematic designs. Some of the statutory approvals of civic authorities of NCR have already been obtained and some are in the pipeline for commencing various activities. The scheme of total works / services on 40 acres of land has been divided into several packages expected to be completed in about three years' time. Contract for Package–I/Phase–I for site clearance, construction of internal roads, rain water harvesting, etc. has already been awarded and execution of these jobs is in progress. Power connection of 2000 KW load has been obtained and dedicated transmission line from nearest power grid in Faridabad to the receiving station at site has already been erected. The survey of remaining 160 acres of land has also been undertaken. The Building Committee constituted for the cluster has been closely monitoring the progress of its various construction activities.

6. Budget and accounts

Sanction of the Govt. of India was communicated vide various orders inter-alia indicating the budget for the establishment of THSTI and various centers under THSTI viz., VIDRC, PBC, CBD and CDSA.

6.1 Utilisation Certificate of THSTI for the Financial Year 2009-10 (Form G. F. R. 19-A)

(Rs. In Lakhs)

1. Title of the Project/ Scheme	Translational Health Science and Technology Institute
2. Name of the Institution	National Institute of Immunology
3. Principal Investigator	Dr. Avadhesha Surolia, In-charge THSTI, Director, NII
4. DBT Sanction letter No. And date sanctioning the project	BT/ MB/ CTHSR/2005 Dated 20th Sep,2007
5. Amount brought forward from the Previous financial year quoting DBT Sanction letter no. & date in which the authority to carry forward the said amount was given	Rs. 2791.42
6. Amount received from the DBT during the financial year (Please give No. And dates of sanctions showing the amounts paid	Rs. 0
7. Other receipts/ interest, if any	Rs. 124.88
8. Total amount that was available for Expenditure (excluding commitments) during the financial year (Sl. 5+6+7)	Rs. 2916.30
9. Actual expenditure during the financial year upto 31st March 2010	Rs. 869.04
10. Unspent balance refunded, if any (Please give details of Cheque No. Etc.)	Nil
11. Balance amount available at the end of the Financial year.	Rs. 2047.26
12. Amount allowed to be carried forward to the next financial year vide letter No. & date.	Rs. 2047.26

Certified that out of the grant of Rs. Nil received during the financial year, unspent balance of Rs. 2791.42 lakhs of the previous financial year and other receipts Rs. 124.88 lakhs, a sum of Rs. 869.04 lakhs has been utilised for the project / scheme for the purpose for which it was sanctioned and the unspent balance of Rs. 2047.26 lakhs will be carried forward to next Financial Year.

Certified that we ourselves have satisfied that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/ are being fulfilled and that we have exercised the checks as laid down in the codal provisions to see that the money was actually utilised for the purpose for which it was sanctioned.

(Dr. Sudhanshu Vrati) FOR HEAD OF THE INSTITUTION MANAGER FINANCE

6.2 Statement of expenditure referred to in para 9 of the Utilization Certificate

TRANSLATIONAL HEALTH SCIENCE AND TECHNOLOGY INSTITUTE (THSTI)
496, Udyog Vihar, Phase- III, Gurgaon - 122016

Showing grants received from the Department of Biotechnology and the Expenditure incurred during the period from 1st April 2009-31st March 2010

STATEMENT OF RECEIPT & EXPENDITURE FOR THSTI FOR 2009-10

HEAD OF ACCOUNT	Opening balance as on 01-04-2009	Grant received during 2009-10	Total Grant	Expenditure	Balance Available
1	2	3	4 (2+3)	5	6 (4-5)
NON-RECURRING					
Building	2178.62	0.00	2178.62	211.19	1967.43
Equipment	498.99	0.00	498.99	480.51	18.48
Furniture and Fixtures	6.41	0.00	6.41	17.92	-11.51
Vehicles	5.00	0.00	5.00	0.00	5.00

HEAD OF ACCOUNT	Opening balance as on 01-04-2009	Grant received during 2009-10	Total Grant	Expenditure	Balance Available
1	2	3	4 (2+3)	5	6 (4-5)
RECURRING					
Manpower	4.18	0.00	4.18	44.00	-39.82
Consumable & Supplies	20.61	0.00	20.61	39.05	-18.44
Office Expenses	-1.81	0.00	-1.81	26.05	-27.86
Contingencies (Other costs)	-1.11	0.00	-1.11	17.45	-18.56
Maintenance & Misc.	0.24	0.00	0.24	32.87	-32.63
Rent	0.00	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00	0.00
Interest Earned		0.00	0.00		0.00
TOTAL	2711.13	0.00	2711.13	869.04	1842.09
Bank interest/ Tender/ Marginal Money	80.29	124.88	205.17	0.00	205.17
G. TOTAL	2791.42	124.88	2916.30	869.04	2047.26

6.3 Utilization Certificate of VIDRC for the FY 2009-10 (Form G.F.R. 19-A)

(Rs. In Lakhs)

1	Title of the Project/Scheme	Vaccine and Infectious Disease Research Centre (VIDRC)
2	Name of the Institution	National Institute of Immunology
3	Principal Investigator	Dr. Sudhanshu Vrati
4	DBT Sanction letter No. and date sanctioning the Project	No. BT/MB/01/VIDRC/08 Date: 27th November, 2008

5	Amount brought forward from the previous financial year quoting DBT Sanction letter no. and date in which the authority to carry forward the said amount was given	Rs. 276.00
6	Amount received from the DBT during the financial year (please give No. and dates of sanctions showing the amounts paid)	Nil
7	Other receipts/interest, if any	Rs. 3.99
8	Total amount that was available for Expenditure (excluding commitments) During the Financial year (SI. 5+6+7)	Rs. 279.99
9	Actual expenditure during the financial year upto 31st March, 2010)	Rs. 184.94
10	Unspent balance refunded, if any (Please give details of cheque no. etc.)	Nil
11	Balance amount available at the end of the Financial year.	Rs. 95.05
12	Amount allowed to be carried forward to the next financial year vide letter No. & date	Rs. 95.05

Certified that out of the grant of Rs. Nil received during the financial year, unspent balance of Rs. 276.00 lakhs of the previous year, and other receipt Rs. 3.99 lakhs, a sum of Rs. 184.94 lakhs has been utilised for the project/ scheme for the purpose which it was sanctioned and the unspent balance of Rs. 95.05 lakhs will be carried forward to next Financial year.

Certified that we ourselves have satisfied that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the checks as laid down in the codal provisions to see that the money was actually utilised for the purpose for which it was sanctioned.

(Dr. Sudhanshu Vrati) FOR HEAD OF THE INSTITUTION MANAGER FINANCE
Principal Investigator

6.4 Statement of expenditure of VIDRC for the FY 2009-10

Statement of expenditure referred to in Para 9 of the Utilisation Certificate

Vaccine and Infectious Disease Research Centre (VIDRC)

Showing grants received from the Department of Biotechnology and the Expenditure incurred during the period from 1st April 2009-31st March 2010

S. No.	Items	Unspent balance carried forward from previous year	Grants received from DBT	Other receipts/ interest earned, if any, on the DBT Grants	Total of Col. (2+3+4)	Expenditure (excluding Commitments) incurred during the year	Balance (5-6)
	1	2	3	4	5	6	7
						(Rs. In Lakh)	
A	**NON-RECURRING**						
1	Land	0.00	0.00	0.00	0.00	0.00	0.00
2	Construction of Lab. Building (Renovation/ Lab. Furniture & fixtures etc.)	99.70	0.00	0.00	99.70	11.48	88.22
	Sub-Total A	99.70	0.00	0.00	99.70	11.48	88.22

S. No.	Items	Unspent balance carried forward from previous year	Grants received from DBT	Other receipts/ interest earned, if any, on the DBT Grants	Total of Col. (2+3+4)	Expenditure (excluding Commitments) incurred during the year	Balance (5-6)
	1	2	3	4	5	6	7
B	**RECURRING**						
1	Manpower	50.00	0.00	0.00	50.00	7.80	42.20
2	Consumable & Supplies	50.00	0.00	0.00	50.00	50.00	0.00
3	Office Expenses	4.65	0.00	0.00	4.65	4.26	0.39
4	Contingencies (OTHER COSTS)	20.00	0.00	0.00	20.00	11.06	8.94
5	Services of SAS to maintain the clinical trial core apabilities for VIDRC	0.00	0.00	0.00	0.00	0.00	0.00
6	Rent for Interim VIDRC Laboratory (10000 sft @ Rs. 50 p.m)	51.65	0.00	0.00	51.65	100.34	-48.69
7	Travel	0.00	0.00	0.00	0.00	0.00	0.00
8	Maintainance & Misc.	0.00	0.00	0.00	0.00	0.00	0.00
	Sub-Total B	176.30	0.00	0.00	176.30	173.46	2.84
C	Bank Interest/ Tender	0.00	0.00	3.99	3.99	0.00	3.99
	Grand Total (A+B+C)	276.00	0.00	3.99	279.99	184.94	95.05

7. Auditor's Report & Audited Accounts

7.1 Auditors report

Kamlesh Kumar Singh
Chartered Accountant

AUDITOR'S REPORT

1- We have audited the attached Balance Sheet of National Institute of Immunology, Aruna Asaf Ali Marg, New Delhi, as at 31st March, 2010 and the annexed Income and Expenditure Account and Receipts and Payments Account of the Institute along with Receipts and Payments Accounts of the Projects for the year ended on that date and the Notes to the Accounts annexed thereto. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audits.

2- We conducted our audit in accordance with auditing standard generally accepted in India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on test basis, evidences supporting the amounts and disclosures in the financial statements. An audits also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

3- Subject to note no.3.1 of Schedule 24 that no depreciation has been provided on the fixed assets of the Institute and that no disclosure of prior period expenses has been made, which are required to be separately placed in the books of accounts as per the provision of accounting standard and accounting policy of the Institute of Chartered Accountants of India. Further to our comments referred to

above and subject to the Significant Accounting policies at Schedule-24 and Contingent Liabilities and Notes to Accounts at Schedule 25, we report that :

(i) The Institute's Balance Sheet, Income and Expenditure Account, Receipts & Payments Accounts of the Institute along with Receipts and Payments Account of the Projects are in agreement with the books of account.

(ii) In our opinion and to the best of information and according to the explanation given to us, give a true and fair view :

a) In the case of Balance Sheet of the state of affairs of the Institute as at 31st March,2010.

b) In the case of Income and Expenditure Account of the excess of Expenditure over Income over Income during the year ended on that date.

Place : New Delhi.
Dated : 1st September, 2010

(K. K. Singh)
Chartered Accountant
Membership No.096686

SCHEDULE 24 – SIGNIFICANT ACCOUNTING POLICIES:-

1. ACCOUNTING CONVENTION

The financial statements are prepared on the basis of historical convention and on the cash method of accounting.

2. INVESTMENTS

Investments are carried at cost. Provision for decline, other than temporary is made in carrying cost of such investments.

3. FIXED ASSETS

3.1 Fixed Assets are stated at their cost of acquisition plus freight charges, if any. No depreciation on the fixed assets are charged and as such no ageing of fixed assets is being done.

3.2 Capital work in progress of civil construction has been done to the extent of last running account bills paid or in case bills have been received to the extent of advance payment made to them.

3.3 Realisation on sale of obsolete/surplus fixed assets not required for the purposes of research are adjusted against Capital Cost and Capital Fund.

4. GOVERNMENT GRANTS/SUBSIDIES

4.1 Government grants of the nature contribution towards capital cost are treated as Capital Reserves.

4.2 Government grants are accounted on the basis of receipt of cheques.

5. FOREIGN CURRENCY TRANSACTION

Transactions denominated in foreign currencies are accounted at the exchange rate prevailing at the date of transaction.

6. RETIREMENT BENEFITS

6.1 Liability towards gratuity payable on death/retirement of employee is calculated on the actual qualifying service of each employee as of the close of the financial year and net amount after taking into account the interest earned on investments during the year is transferred to the gratuity fund.

6.2 No provision for accumulated leave encashment benefit to the employees has been ascertained and provided at the year end.

7. PROJECT GRANTS

7.1 The Institute receives extra mural project grants from National and International agencies for specific research programmes.

7.2 The Institute has a policy of allocating the overhead and transfer of expenditure of NII to different projects at the end on ad-hoc basis after taking into account the amount of maximum permissible limits for overheads and after expenditure sanctioned by the funding agency for each project.

8. CONSUMABLE STORES

All purchases of chemicals, glassware, LPG, consumable stores and stationery items have been charged to expense account at the time of purchase.

For **KAMLESH KUMAR SINGH**
CHARTERED ACCOUNTANT

(Dr. Avadhesha Surolia)
DIRECTOR

(S.KANNAN)
MANAGER (FINANCE)

Place : New Delhi
Dated : 1st September, 2010

SCHEDULE 25 – CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS:-

1. Staff advances of Rs. 5,73,498.00 are subject to confirmation/adjustment.
2. Gratuity amounting to Rs. 5,55,55,590.00 payable to staff of NII has been ascertained by the Institute up to the year ended 31.03.2010.
3. Advances to supplier for Rs. 55,274.00 is subject to confirmation/adjustment out of which Rs. 16,934.00 relates to prior period which is pending for recovery/adjustment.
4. The Institute has paid a total sum of Rs. 32.00 Crores during the Financial Year 2008-09 to Municipal Corporation Faridabad (MCF) towards the Cost of 160 acre land at Faridabad. The possession of the land is yet to be taken.
5. The interest income on Fixed Deposits/ Investments for CP Fund is being shown net of Tax deducted at Source. The amount deducted during the year was Rs. 97,990.00
6. The Institute has a policy of debiting the Festival Advance to Salary, wages & other allowances Head at the time of granting the advance and crediting it to Salary, wages & other allowance Head at the time of recovery made from the salary of the staff. As on 31st March, 2010, the outstanding Festival advance debited to Salary is Rs. 66,650.00
7. The Physical Verification of Fixed Assets for the year 2009-10 is under process by various sub- committees formed for this purpose. The surplus/ deficiencies noticed therein shall be dealt with in subsequent year.
8. The previous year have been regrouped/ rearranged, wherever necessary.

For **KAMLESH KUMAR SINGH**
CHARTERED ACCOUNTANT

(Dr. Avadhesha Surolia)
DIRECTOR

(S.KANNAN)
MANAGER (FINANCE)

Place : New Delhi
Dated : 1st September, 2010

(Since the NII had been entrusted with the responsibility of financial management of THSTI, the balance sheet of NII reflects to THSTI's receipts and expenditure as one of it's annexures attached to the balance sheet for the year under review)

7.2 Audited receipts and payments.

Annexure-165
THSTI

National Institute of Immunology
Receipt & Payments Account of Grant-in-Aid
For Project On THSTI
For The Year Ended-31-03-2010

Previous Year	Receipts	Amounts (Rs.)	Previous Year	Payments	Amounts (Rs.)
	OPENING BALANCE	–			
80,000,000.00	Fixed Deposit	275,000,000.00	–	Building (WIP)	6,448,755.00
18,341,623.00	With Bank	4,141,905.00	103,175.00	Building	2,315,226.00
178,360,000.00	Grant-in-Aid	–	81,400.00	Air Conditioner	6,040,178.00
8,016,788.00	Interest	12,470,396.00	–	DG Set	6,314,709.00
12,000.00	Sale of Tender	17,500.00	–	Equipment	10,851,067.00
–	Adv To Supp	195,000.00	–	Margin Money (EQPT)	37,200,000.00
			125,817.00	Furniture & Fixtures	1,791,673.00
			–	Books & Periodical	3,715.00
			1,438,554.00	Salary/ Consultancy	4,401,378.00
			–	Medical Expenses	5,557.00
			982,434.00	Travelling Allowance	724,370.00
			664,221.00	Advertisement	1,168,652.00
			962,334.00	Local Meeting	717,057.00
			195,000.00	Advance To Supplier	–
			–	Maintenance of Building	3,200,084.00
			–	MODG	70,180.00
			–	Maintenance of EQPT	17,600.00
			13,804.00	MISC	102,781.00
			9,808.00	Conveyance	17,046.00
			326,217.00	Consumables	3,802,050.00
			87,597.00	Non–Consumables	75,486.00
			–	C & H Charges	27,758.00
			11,774.00	Printing & Stationery	60,920.00
			30,355.00	Telephone /Fax	126,623.37
			4,417.00	Postage	26,811.00
			551,599.00	Transport	1,023,757.00
			–	Electricity Charges	539,265.00
			–	Water Charges	27,267.00
				CLOSING BALANCE	
			275,000,000.00	Fixed Deposit	144,200,000.00
			4,141,905.00	With Bank	60,524,835.63
284,730,411.00	**TOTAL**	**291,824,801.00**	**284,730,411.00**	**TOTAL**	**291,824,801.00**

NCR-BIOTECH SCIENCE CLUSTER (NCR-BSC)
FARIDABAD (PERMANENT CAMPUS)

TRANSLATIONAL HEALTH SCIENCE & TECHNOLOGY INSTITUTE
496, Udyog Vihar, Phase-III, Gurgaon-122016
Phone: 0124-4053377, 2876401; Fax: 0124-2876402
Email: info@thsti.res.in; URL : http://www.thsti.res.in