

**NATIONAL LIVER DISEASE BIOBANK**  
**SUPPORTED BY DBT - ILBS**

**ANNUAL REPORT**  
**YEAR 2**

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## Progress Report for R&D Projects [Year2]

**Proposal ID:BT/PR7403/MED/29/657/2012**

- 1. Project Title:** "Setting up the National Biobank facility for clinical and basic research in HCV at ILBS" renamed as "National Liver Disease Biobank" on suggestions from Steering committee"

**DBT Sanction Order No. & Date:**

57, 102/IFD/SAN/2672/2018-2019 dated September 27, 2018 &  
58, 102/IFD/SAN/2673/2018-2019 dated September 27, 2018

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**4. Date of start: October 2016**

**5. Duration: 5 Years**

## 6. Objectives of the Project:

- To Establish an Independent National Biobank facility on HCV research, functional testing of cryopreservation and analytical systems and implementation of quality assurance practices in Biobanking.
- Nationwide capacity building in HCV research by sharing the resources and informatics and strengthening competence and capabilities of stakeholders for HCV Research in India.
- To attain partial sustenance model to deliver the excellence in Biobanking services by adopting the C-CAMP like Business and financial model by utilizing the Biobank cryopreservation, analytical services and other resources.
- To undertake Biobank based pilot projects and to develop the Biobanking based need and science in India.

## 7. Methodology (Experiment work giving full detail of experiment set up, methods adopted, data collected, supported by necessary table, charts, diagrams, photographs).

**Establishment:** Biobank is all set and functional with different rooms for offices, reception, processing and storage area. A separate storage space for Liquid Nitrogen Tanks is allotted and ready for biobank.

**Table-1: Equipments Status: Cryopreservation & Analytical Systems:**

S. No.	Items	Status
1.	Liquid Nitrogen Tanks Capacity App. 100000 vials (qty-2) *I year	Installed and working
2.	Liquid Nitrogen Tanks Capacity App. 100000 vials (qty-2) *II year	Tender under process
3.	Controlled Rate Freezer	Pending Inspection and Installation
4.	Cryo shippers 35VHCV-11M (qty-4) *I year	Installed and working
5.	Cryo shippers CXR500-0 (qty-2) *I year	Installed and working
6.	Cryo shippers (qty-4) *II year	Repeat order under process
7.	Cryo shippers (qty-2) *II year	Repeat order under process
8.	Shipping Case (qty-2)	Installed and working
9.	-80°C ULT Freezer System (qty-3) *I year	Installed and working
10.	-80°C ULT Freezer System (qty-2) *II year	Tender under process
11.	-20°C ULT Freezer System	Installed and working
12.	Lab Freezers (qty-2)	Installed and working
13.	Sample Pass Box (qty-2)	Installed and working
14.	Bio safety cabinet class-II Type A-2 Esco Airstream Class-II Type A-2 biological safety cabinet	Installed and working
15.	Micro-Centrifuge with rotors and adapters	Installed and working
16.	CO2 Incubator with Accessories	Installed and working
17.	Grossing Station	Installed and working
18.	Cryotome	Installed and working
19.	Semi-automatic Rotary Microtome	Installed and working
20.	Semi-Automated Tissue Processor	Installed and working
21.	Tissue Embedding Station	Installed and working
22.	Microscope	Installed and working
23.	Automated Immunostainer IHC/IF/ISF	Installed and working
24.	Flow Cytometer with Cell Sorter	Purchased, in transit
25.	NGS	Installation done
26.	High Resolution MS/MS System (Mass Spectrometer)	Purchased, in transit

27.	Software, hardware, computers (SQL Server with supporting equipments and Laptop with MS Visual studio)	In house software designed and 60% process developed according to the needs of the biobank.
28.	Miscellaneous equipments (Tissue Flotation Bath, Slide warmer, Ph meter, Water bath, Block cabinet (qty-2), Micro-slide cabinet, Lab freezer, Mini gel tank, Microwave oven, Dry bath with blocks, Hot air oven, Oxygen Meter with sensor & Buzzer, Qubit fluorometer)	-Installed and working

### IT and Software Development:

Software is the most important aspect in biobanking for management of biological sample with the implementation of barcode systems, Laboratory Information Management Systems (LIMS) and collaborative tools for sharing biological sample collections are required.

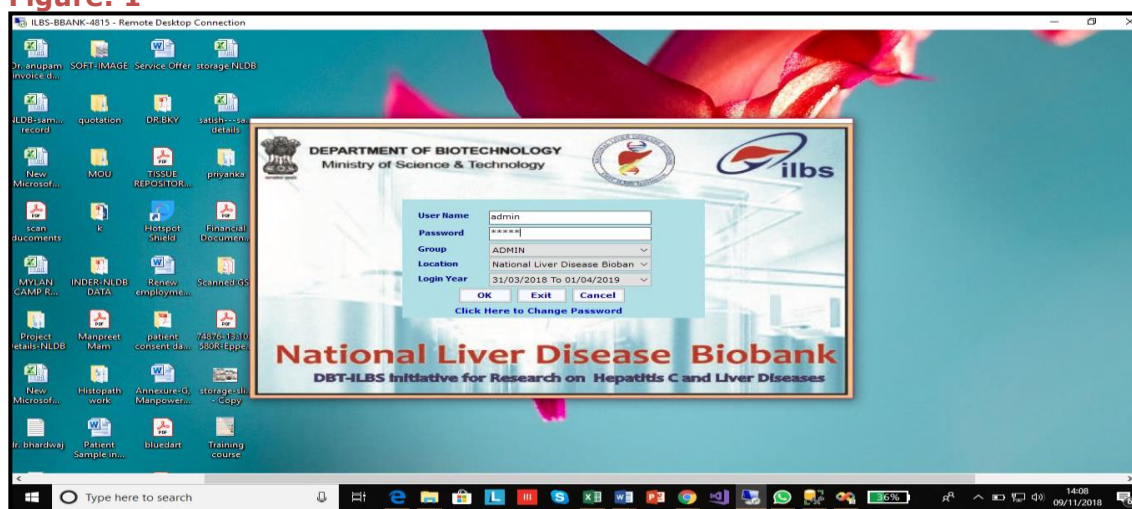
Many LIMS software were reviewed by IT manager, PI and Biobank manager; based on comparative studies, demos and our requirements, experts did not found any suitable software or found them very costly at the range of 55-65 lacks (modul-bio) for NLDB. Then we decided to develop in-house software by utilizing the funds allocated in this head.

Inputs from PI, biobank team, experts, demos, and international experts were collected and we started to develop biobank software named "*National Biobank Information Management Systems (NBIMS)*" after purchasing the required hardware and software.

#### (NBIMS) Software features:

- Storage Management
- Sample management
- Workflow management
- Subject management
- Data tracking, security & Regulatory Compliant
- Request management
- Configuration management
- Mobile reports

#### • Figure: 1



NBIMS (National Biobank Information Management Systems) has been designed and work started on Software with two levels architecture:

In frontend Visual Studio 2017

In Backend – SQL server 2017

Complete NBIMS software has been divided in 4 Module as follows:

**1. Login Module:**

Containing login component i.e. User Name, Password, User Group, Biobank Location and user Entry Location.

**2. Security Module:**

It has all features of secure software i.e. User Access Module, Group Access, and Password change.

**3. Biobank Start-up Module:**

This Module covers all master forms and biobank Setup Form in initial stage, which includes the configuration of software before start.

**4. Biobank Module:**

With help of this module we operate all day-to-day operations of biobank from Patient Registration, Sample Details to storage of the sample.

**Dashboard:**

With help of Dashboard, We can easily track the movement of sample from collection to storage. Dashboard has colour coding system to recognize status of samples in biobank.

60% NBIMS software development has been completed from sample collection to storage.

**In Progress:**

- Retrieval of sample, shipment and billing
- Accesses control to collaborative hospitals

**NBIMS Training:**

Biobank software is introduced to biobank and training is provided. Existing Data were imported and routine management of biosample has been started with software.

**Website Development and Promotion:**

- Domain name [www.nldb.in/](http://www.nldb.in/)
- Errors were removed from internal panel and Banner improvement.
- Updated Project list, team member, committee member list and photos were uploaded
- Site was promoted by social bookmarking, directories submissions, on page analysis, meta tag analysis and Various key words related to our biobank were promoted
- Blogs and biobank links were uploaded on popular sites, incorporation of new meta tags
- Wikipedia Hindi page created.

**Web Application:**

We are working on a Web application to collaborate with most of the hospital and after their permission collect the samples and associated data via on line access.

## **Legal framework of biobank operations:**

### **Legal Advice on policy documents:**

- **Agreements & Policy**
  - General Memorandum of Understanding
  - Collaboration agreement
  - Material Transfer Agreement (MTA)
  - Service Agreement
  - Sharing policy
- **Forms created with Legal Advice:**
  - Informed Consent
    - Hindi
    - English
  - Service Requisition Form (revised)
- **SOPs reviewed by Legal advisor & Core committee:**
  - Database Backup
  - Document Maintenance
  - Ethics
  - Information Access Control
  - Inventory Verification
  - Labelling and tracking materials
  - Materials and information
  - Material request and release
  - Participant recruitment into a biobank program
  - Privacy and security
  - Records and documentation
  - Process of sharing the biobank the resources
  - Biosample collection and transportation
- **Suggestions from Legal advisor:**
  - Requirement based undertaking from end users.
  - Material Transfer Agreement between end user and NLDB.
  - Sample sharing based on requisition from National/International researchers.
  - Multi layer data decoding of samples.

## **Ethical Approval:**

- As per ICMR biobanking guidelines 2017 and based on five external biobank experts reviews we designed blanket consent format to cover the broader objectives for future research and got approval for sample collection through blanket informed consent. It will create and serve as a prototype for other institutes on similar lines. IRB Number:F.25/5/107/ILBS/AC/2016/11252/2454 dated 21<sup>st</sup> July 2018 IEC/2018/61/NA01

## **Methods Adopted**

- We have adopted Decentralised sample collection, centralised storage and centralised informatics model for our National biobank facility.
- Collection and storage of biosamples on sharing basis
- Marketing and ads (spreading awareness about bio bank in other hospitals and to other doctors).
- Personal contact with researchers and clinician
- Participation in conferences



- Organizing workshop and training program in biobanking and analytical facilities

## Information brochure and Flyers: Figure 2

### Biobank Services

STORAGE	BIOSAMPLES & CLINICAL ANNOTATION	ANALYTICAL SERVICES	SCOPE OF COLLABORATION
 <p>Liquid storage @ -80 °C freezer We provide storage facilities in nitrogen tanks and -80°C as per the project requirement along with specimen tracking through LIMS software</p>	 <p>Tissue collection, blood, urine collection, Food Prevalence based tissue, Prevalence based blood, Liver cryo preservation tissue, Liver cryo- preservation blood, Clinical Annotation, Follow-up data</p>	 <p>Microarray next generation sequencing (NGS), Flow cytometry, RNA, DNA, etc. Tissue homogenization and extraction of nucleus, Tissue gene expression profiling, Pathology related services, Construction of new resources</p>	 <p>Contract Research Collaborative Projects Prospective Sample Collection Clinical Trials</p>



**Data Services**  
Level I data related to tissue collection, storage and distribution  
Level II pathology report information  
Level III clinical follow-up disease progression  
Level IV clinical follow-up treatment data

**NLDB**  
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### Models of availing biobank services

- Rental for storage**  
You can store your samples at biobank in various storage system as per your requirement, the list of which is already mentioned.
- Retrieval of biosamples**  
You can retrieve your samples stored at biobank facility with a nominal charge as storage, handling and maintenance. This service is only offered to the Hospital/Institute/PI, who donates duplicate samples (1. For NLDB - 2. Stores duplicate sample at NLDB for self use).
- Sample sharing**  
The number of samples you store at biobank will be divided equally under the following policy:  

50%	50%
You will provide these samples to the Hospital/Institute/PI, who donates duplicate samples (1. For NLDB - 2. Stores duplicate sample at NLDB for self use).	Donation of these samples remains with biobank facility and the biobank will ensure the quality of the samples provided by you without any charges.
- Revenue sharing**  
Revenue generated by industry collaboration can be shared between NLDB and Hospital/Institute for the stored samples by the provider.
- Sample exchange**  
Samples stored by Hospital/PI and stored at NLDB can be exchanged with other samples from common pool (eg. Tissue with plasma, or vice versa).
- Training facilities**  
Technical training on NGS, FACS, Mass Spectrometry etc. are also provided at NLDB.
- Academic courses**  
Academic courses for Scientific, Medical and technical professionals in Biobanking.  
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**Accelerating Research & Biobanking Sciences**

### About biobank

A biobank is a biorepository that stores biological samples along with clinical annotation for use in research. Biobank is an important resource in medical research, supporting many types of contemporary research like genomics and personalized medicine. It gives researchers access to data and biological samples representing a large number of people. Samples in biobanks and the data derived from these samples are used by multiple researchers for cross-personal research studies.

### Purpose of biobank

The purpose of a biobank is to maintain biological specimens, and associated information, for use in research fields. The biorepository ensures the quality and manages the accessibility and distribution/disposition of the biospecimens in its collection. In a Biobank (like NLDB), researchers can carry out their research from start to end in one go under one roof with advanced and world class research equipments.

### Types of samples can be stored / availed from NLDB

Fresh Tissue, Frozen Tissue, Formalin Fixed Tissue, Body Fluid, Blood, serum, plasma, urine, sputum, FFPE block, sample slide, DNA, RNA, PBMCs.

### Services offered by NLDB

- Standardized sample collection and storage of human and animal biosamples with clinical annotation as per international standards (ISO & Liquid Nitrogen).
- Clinical trials and project sample storage.
- Analytical services on mass spectrometer, Flow cytometer with cell sorting, NGS, automated immunostaining, immunofluorescence, imaging.
- Training and courses in biobanking.
- Histopathological services.
- NLDB provides consultancy services to hospital/research institutes for setting up or maintaining biorepository.

### How researchers can be benefited using NLDB services

As our primary and most important focus is to promote research programs and facilitate researchers with cutting edge technology and high quality bio-samples, researchers can avail the following benefits:

- Biosample storage & processing**  
We collect and maintain highest quality of biospecimens as per international standards for researchers to get best and accurate results. Our storage system ensures utmost care modification/change in the state of the stored samples, we provide storage facilities in both storage tanks & -80°C freezers based on your requirements. With highly trained technical staffs at our Biobank, we are able to process your samples right from the collection from the subject.
- Customized data sets/clinical annotations.**  
Clinical annotations are maintained in LIMS software and also we can provide customized data sets as per project requirements.
- Analytical services**  
Advanced analytical facilities like mass spectrometry, Flow Cytometry, Next Generation Sequencing, Immuno-Histochemistry, Polymerase Chain Reaction etc. are available at NLDB.
- Prospective sample collection**  
We have collaboration with various hospitals/clinics centres from where we are able to provide samples based on your requirements.
- Cohort studies**  
Cohort studies for specific groups is one of the unique feature of NLDB provided to researchers.
- Time management**  
We take your lead for collection, data management, biospecimen handling, storage, analytical services which saves your time and help you to reach conclusion in faster and easier way.
- Saves money**  
This facility will acquire a non-profitable business and financial model, thus you can avoid storage and analytical services at very normal charges and joint projects with NLDB are also like to get funded easily because of requirement of less funds.

## NLDB Cryostorage:

**Table: 2: Samples Stored at NLDB:**

We have collected, processed and stored project driven biosamples as per suggestions of Steering committee:

(Detailed summary attached as **Annexure-1**)

Sample collected until 10.11.2018

S. No.	Types of Sample	Types of Disease	No. of Patient samples
1	Serum	Negative control	9558
2	Serum	Liver diseases	180
3	Plasma	Liver diseases	3108
4	PBMC	Liver diseases	897
5	Urine	Negative control	90
6	Urine	Various Cancer	39
7	Tissue	Liver diseases	96
<b>Total</b>			<b>13968</b>



**Table: 3: Analytical Services rendered to non-host Institutes/Researchers till 10.11.2018:**

Process Name	Total Process
Process, Embed, Stained slide	40
Process, embed, H&E slide	635
Special Stain (MT)	151
IHC	4
IF Slide	14
unstained slide	339
PAS	46
AFB/PB	67
Embed snap-frozen tissue	42
Assessment, Reporting & image analysis	63
Retic /Decalcification bone staining	29
OCT embedding	14
<b>Grand Total</b>	<b>1444</b>

NLDB has supported projects in different Institutes via analytical services on human as well as on animal biosamples

**Table: 4 Project based Requests received from different Institutes until 10.11.2018:**

National			
Research Institute	Sample Type	Patient/Donor	Identified Provider Hospital
IGIB	Frozen Tissues	Cancer	Max (Saket)
THSTI	Plasma	NASH	ILBS; Max (Saket)
Jamia Hamdard	Serum/Saliva	Cancer	Max (Saket)
ITRC	Tissue/ serum	liver disease and healthy control	ILBS
South Asian University	Frozen Tissues	Cancer, Gall bladder / Kidney	ILBS; Max (Saket)
INMAS	Cell Lines	HUVEC (from Single Donor)	ILBS
JNU	Serum/Saliva/Plasma	Head and neck cancer, Depression, Yoga / Meditation	Max (Saket), Spinal Injuries Hospital; Shanti Mukand
JNU, Common pool	Plasma / Serum	Yoga / Meditation	In talks with Yoga centres
DU	Plasma	Infected blood	Janakpuri Super Specialty Hospital
DTU	Plasma	Hep B / C	ILBS
ILBS, Nutrition	Tissue / Plasma/ PBMC	NASH	ILBS
ILBS, Common pool	Urine	Cancer	ILBS

NCBS	Cell Lines	Primary hepatocyte (Mice)	ILBS
National Institute of Pathology	Tissue/Plasma	Gallstone cases, Peri-tumoral tissue, Bile- Controls	In talks with hospitals
CFTRI	NAFLD (Diabetic/Non-diabetic)	Liver Disease	ILBS
<b>International</b>			
Trans-hit Bio	Plasma / PBMC	Renal transplant, Solid organ transplant rejection	Max (Saket); ILBS

#### **Collaboration status with hospitals for collection of Biosamples until 10.11.2018:**

Several hospitals were visited in Delhi/NCR for collaboration to collect excess biosamples after clinical and pathological diagnosis.

Currently we have served MOU in the following hospitals:

- R&R Hospital, MOU at Ministry level approval
- Northern Railway Central Hospital, MOU at Ethical level approval
- Max Hospital (Saket), MOU at Ethical level approval
- Max Hospital (Patparganj), MOU at Ethical level approval
- Indian Spinal Injuries Centre MOU at Dean level approval
- MEDANTA (Gurugram) MOU at Ethical level approval
- Shanti Mukand Hospital, MOU served
- AIIMS, MOU served

#### **8. Interim modification of objectives/methodology (with justification).**

To broaden the scope of biobank by storing more valuable samples with well defined annotation, follow-up data , to make bank self sustainable and to retain Highly qualified manpower Steering cum core Committee recommended new objectives as follows:

- To broaden the scope of biobank Hep C to all liver disease including biliary and pancreatic diseases. It is to be known as National Liver Disease.
- To implement the quality assurance practices from the outset with the goal of aiming for accreditation and targeted approach for sample collections by involvement of academic medical centres and identify and categorise the sample collections according to high priority science areas, investigators driven sample collection from host institute as an accessible major clinical and research facility.
- To provide contract research by using the wide spectrum of analytical services in the biobank.
- To collect samples from HBV/HCV/HIV co-infected patients and increasing the value of biosamples by ensuring appropriate clinical data and collecting them not only at one time, but with long-term follow-ups.
- DBT needs to consider the biobank manpower salaries at par with ILBS.

## 9. Summary on progress (during the period of report) vis-a-vis time schedule.

**Table: 5: Targets achieved vs. proposed timelines for year 2**

		Second Year			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
<b>Proposed</b>	Establishment and installation of Cryopreservation infrastructure				
<b>Achieved</b>					
<b>Proposed</b>	Establishment and installation of Analytical infrastructure				
<b>Achieved</b>					
<b>Proposed</b>	Verification Cryopreservation and Analytical functional facility of Biobank and Operations				
<b>Achieved</b>					
<b>Proposed</b>	Establishment and implementation of Standard Operating Procedures				
<b>Achieved</b>					
<b>Proposed</b>	Quality assurance				
<b>Achieved</b>					

Ordering & tendering was done already in first year and we received the cryopreservation and supporting equipments (Liquid Nitrogen Tanks (LN2), -80°C deep freezers and -20°C deep freezer). -80°C and -20°C deep freezer were installed and made functional in first and second quarters. Installation of LN2 tanks completed. Histopathological equipments were installed in first and second quarter and are now functional. Installation of NGS completed in starting of fourth quarter. FACS and Mass Spectrometer are in transit and we expect the awaiting shipment to be completed by Dec 2018; in between the required infrastructural facility for FACS and Mass spectrometer is under construction.

Verification of -80°C & -20°C deep freezers and supporting equipments is done and we expect LN2 tank verification to be completed. Verification of analytical facilities is 80% completed and the remaining analytical facilities FACS and mass spectrometer are on verge of completion and will be completed by end of 2018. SOPs are established reviewed and approved by neutral experts and legal advisor. Policies and SOPs are being implemented as quality practice. Standardised protocols are followed for collecting, transporting, receiving, processing (includes decoding), maintaining quality and storing to ensure quality. Multi layer access implemented in the software for access of patients clinical data. A Jr. Tech executive left NLDB and was replaced after the recruitment process; IT Manager was recruited in mid of second quarter. Collection, storage and analytical services started from outside and from ILBS.

Validation of stored samples for scientific usage, participation of researchers stakeholders, joint collaborations, training programme and business development has started before the propose timeline.

## 10. Detailed analysis of Results indication contributions made towards increasing the state and knowledge in the subject.

### Resource Sharing with Institutes/Researchers and Others in 2017-18 :

**The following Institutes and Researchers/Students from the Institutes are using our services on regular basis:**

- Institute of Liver & Biliary Sciences (ILBS)
- Institute of Nuclear Medicine & Allied Sciences (INMAS)
- Defence Institute of Physiology & Allied Sciences (DIPAS)
- Delhi Institute of Pharmaceutical Sciences and Research (DIPSAR)
- Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
- Translational Health Science And Technology Institute (THSTI)
- Datt Mediproducts Pvt. Ltd.
- National Institute of Immunology (NII)
- Biolinx India (\*advertisement on NLDB website)

### Service Agreements Signed:

- NLDB has signed 10 Storage and 3 Analytical service agreements with researchers and PIs from ILBS and INMAS. (details attached as **Annexure-2(A)**)

### Collaborative Projects:

- NLDB has submitted 7 collaborative projects with Researchers/Scientists from ILBS and South Asian University. (details attached as **Annexure-2(B)**)

### Transient Storage facility provided:

- NLDB have served transient storage facility to 4 researchers who appealed NLDB in urgent situation for their samples.

### Website Advertisement

- NLDB started providing space for advertisement at its website with proper valid IT advised disclaimer.

### Academic and outreach activities:

- Visited *Clinicians (60); Hospitals (32); Research Institutes (15); Researchers/Scientists (63); Universities (7)* across Delhi/NCR to spread awareness and benefits of biobank services and to collaborate for storing biosamples at National Liver Disease Biobank (NLDB).
- Contacted and reached Researchers/Students/Scientist via emails and personal visits to help their research studies.
- Director ILBS (Dr. S.K. Sarin) apprise about the NLDB to DBT, DST, SERB & ICMR to promote the biobank. The Secretary, SERB responded via letter dated 30<sup>th</sup> Oct, 18 (**Annexure-3**) ensuring to make this facility more utilizable and Secretary SERB sent mails to all investigators, where it is funded by SERB, DST. We expect similar approach from the DBT.
- 15 researchers contacted NLDB to avail the biobank services after circulating the mail by Sec. SERB.

- NLDB has organized one day workshop for students from Amity University to spread awareness and benefits of biobank and also presented overview of biobank activities.
- Communications tools and materials have already been developed like flyers and an Information Brochure for both donors and researchers.

- **National Platform:**

Participated in 5 conferences and also given presentations in Research institutes/Universities in Delhi/NCR, reaching researchers and students explaining biobanking concept and educating its benefits.

- *APASL-2018*, Delhi (India)
- *ISPGHAN-2018*, Mumbai (India)
- *ACBR-2018*, Delhi (India)
- *Drug Discovery Research Centre (DDRC)(THSTI)*, Delhi(India)
- *National Conference on Advances in Biotechnology-2018*, Sharda University, Noida (India)
- *First National Update on Nephrology & Renal Transplant-2018*, ILBS, Delhi (India)

**International Platform:**

Dr. Birendra Kr. Yadav, Biobank Manager had given a presentation on topic entitled "National Liver Disease Biobank in India: Fostering Research Collaboration across India and Abroad" in prestigious biobanking conference, ISBER-2018 annual meet in Dallas-USA.

**Trainings:**

- Biobank Manager visited Sing Health Tissue Repository, Singapore on Sept. 18<sup>th</sup>, 2018 for biobank training and international exposure in biobanking.
- Training in IHC/ Immuno-fluorescence on Automated Immunostainer by scientists from Biogenex for Technical Staffs
- Training on Tissue processing, Embedding, Cutting, Slide Preparation were provided to Technical Staffs.
- A junior technical executive has received training in Molecular Laboratory and cell sorting.

**Awards:**

- Vivid Foundation, NGO (Delhi) has awarded us "Innovation in Health" award for performing unique work in field of biomedical research.
- Dr. Birendra Yadav (Biobank Manager) received Travel Award from apex biobanking society ISBER in 2018

**Directions and benefits attained from international organisation:**

Networking with international biobank communities is necessary for development and growth, education, innovations and harmonisation in biobanking. We have joined following international societies:

- *Asian Network of Research Resource Centres (ANRRC)*: ANRRC helped us in introducing biobanking experts for International Advisory Committee member from Asia.
- *ISBER Membership* grants free access to guidelines of ISBER (ISBER Best Practices and Self-Assessment Tool (SAT). It also make easy for us to connect and share with experts in the field of biobanking.

**Biobanking certificate/ diploma course:**

Biobank course has been designed and approved by ILBS academic council (F.25/1/7/AC/ILBS/2014/8313/2095 dated 26/05/2018). The basic purpose of this course is to give in-depth knowledge and train students in the field of biobanking.

**Publications:**

- Yadav BK, Bihari C "Biobanking initiatives to develop a national liver disease biobank facility in India" *Per Med*. 2018 Nov 5. doi: 10.2217/pme-2018-0019. [Epub ahead of print]
- Yadav BK, Bihari C "Biobanking in India and its importance in cancer research" *Edorium J Cancer* 2017; 3:10–12.

**Abstracts:**

Following Abstracts were accepted in International Conferences:

- "National Liver Disease Biobank in India: Fostering Research Collaboration across India and Abroad, ISBER-2018
- "Indian Biobanks: Biosamples and Data sharing, Europe Biobank Week"-2018, Antwerp
- "Indian Biobanks: Governance and Ethical-Legal and Social Issues" ANRRC-2018, Seoul
- "The National Liver Disease Biobank: A Good Resource for Liver and Associated Cancer Research", ESMO-ASIA-2018, Singapore

**Consultancy & Support:**

- Biobank has started to provide consultancy support for new biobank; Sir Ganga Ram Hospital has approached & discussed to avail our consultancy on how to build a biobank.

## **New Leads Obtained:**

### **Set-up of counselling centre:**

While visiting to institutes it was felt that a counselling centre is needed in the institute and ILBS settled it for patients referred by hospitals, diagnostics laboratories and blood banks. We are counselling 5-8 patients daily. While counselling the patient, it is easier to obtain informed consent for left over samples or sample collection.

Further it is planned that NASH patients to be counselled by nutritionists and alcoholic patients by health psychologists (Clinician or Dieticians)

### **Requests for collection of biospecimen:**

We have received biosample requirements from different National and International Research Institutes/Universities for various projects; on the basis of the project requirements we are collecting biosamples and approaching different hospitals to fulfil their requirements to support them.

### **International Advisory committee:**

The committee was constituted to:

- Review SOPs, Biobank Policy, Advice on how to advance National Liver Disease Biobank's promotion and goals
- Help in development of proposals for the future organisation of meetings and educational opportunities.

### **International Advisory Members**

- Dr. Gramatiuk Svetlana, President Ukraine Association of Biobank
- Dr. Olga Potapova, CEO and Scientific director, Cureline
- Prof. Daniel Cathpoole, Group Leader, Biospecimens Research and Tumour Bank, Children's Cancer Research Unit; The Kids Research Institute; The Children's Hospital.
- Prof. James J. Potter, Assistant Professor, The Johns Hopkins University, School of Medicine Baltimore
- Dr. Robert Hewitt, Director, Biobank consortia and Communication Trans-Hit Biomarkers, Inc.
- Dr. Soo-Yong Tan, Head & Senior Consultant, National University Cancer Institute, Singapore (NCIS), ANRRC-Executive Board Member
- Dr. Rajeev Singh, Director, HMRI Biorepository Houston
- Dr. Zisis Kozlakidis, Head, Laboratory Services and Biobanking (IARC/WHO); ISBER Past-President; Scientific Advisor at PTEN Research
- Dr. Daniel Simeon-Dubach, Director, Med-service, Walchwil; Chair, ISBER Standards Advisory Committee

### **Steering cum Executive Committee Meeting:**

First steering cum Executive Committee meeting was held on 13th Feb, 2018. The committee appreciated the efforts, initiatives and developments in the NLDB and found the work so far to be satisfactory and valuable suggestions suggested from the Chairperson and Members that are being followed.

## **11. Summary and Conclusions**

NLDB is all set and functional with rooms for offices, reception, and processing and storage area (different -80 and LN2). A separate storage space for Liquid Nitrogen Tanks is allotted and ready for biobank. IT Manager was recruited and 60 % NBIMS



software development has been completed and introduced to biobank and training is provided. Routine management of biosample has been started with software. Errors were removed from web site and various key words related to our biobank were promoted. SOPs are implemented, Agreements, service requisition form and Consent form legally validated and consent are approved by ILBS ethical committee. Project based Collection as well as routine collection of biosamples is started from ILBS and outside. NLDB has supported many projects in different Institutes via analytical services and at present users from nine Institutes/organization are using our services on regular basis. Biobank has submitted 6 joint projects and signed 12 agreements for service. We have participated in 5 conferences; organised workshop and approached Clinicians/Hospitals/Research Institutes/Researchers across Delhi/NCR to spread awareness. We have constituted International advisory committee, joined ANRRC and ISBER membership and received two awards in 2018. Biobank is making its stand among researchers and we are receiving samples/ analytical service request from national and international institutes. We are currently on verge of signing MOU with five hospitals.

**12. Applied value of the project: Rs. 22.32 cr**

**13. Research work which remains to be done under the project.**

#### **Project Work**

##### **Third Year**

**Establishment and implementation of Standard Operating Procedures**

**Quality assurance**

**Collection and storage of samples from institute other than host institute**

**Validation of stored samples for scientific usage**

**Participation of researchers stakeholders**

##### **Fourth Year**

**Quality assurance**

**Collection and storage of samples from institute other than host institute**

**Validation of stored samples for scientific usage**

**Participation of researchers stakeholders**

**Training programme**

**Business Development**

##### **Fifth Year**

**Quality assurance**

**Collection and storage of samples from institute other than host institute**

**Validation of stored samples for scientific usage**

**Participation of researchers stakeholders**

**Training programme**

**Business Development**

SOPs, established after external review in second year will be implemented in third year. It will be standardized by the first half of third year. Then the quality practice implementation with the suggestions and inputs from the user's experts will be started and they will go along the Biobank programme. Biobank will start collecting and storing the samples once the SOPs, policies and quality practices are implemented and the collection will be started from the beginning of Year-3 Biobank will caters biosamples across the country. Biobank will start validating the stored samples in middle of the third year and then samples will be available for customers, researchers, collaborators. The training programme will be started from the fourth year to prepare the human resources in the field of cryopreservation in India and Simultaneously Biobank will develop a business model for its sustenance by academic and industrial collaborations and liaisons. To summarize in first and second year the infrastructure for cryopreservation and analysis will be established, third year will be dedicated for the quality assurance in the Biobank operation in fourth and fifth year there be focus on the HR development and business development of Biobank. But the operational, collection, storage, processing, sharing and sustenance model will expect to be started from the beginning of third year.

#### **14. Scope for future work**

The establishment of National Liver Disease Biobank is an important step towards establishing national liver disease research programmes. Following would be the scope of future work in the field of liver disease biobank

Biobank ethical committee and Sample release board is to be defined with due deliberation with SSACC/ core committee meeting

**Collaboration:** Biobank has signed MOU with different hospitals and provided collection devices, SOPs, manuals for the standard collection, quality control and training in Delhi and have plan to collect biosamples from different parts of India for which request will be made to different hospitals for collaboration.

**Joint proposal:** Biobanks are precious source of samples and data for the development of commercial products in both public and private sectors. We will propose joint project proposal with industry for development of new products.

**Consultancy:** Biobank will serve as consultancy agency for developing and designing, providing necessary documents, framework for new biobank.

**Biobank course:** Biobank will develop capacity of human resources in the country by training paramedical and medical staffs. We will also start a diploma/certificate courses for medical students, laboratory technicians, life science students, doctors and researchers etc.

**Welfare of biobank personnel:** We will provide bonus, Employee Provident Fund, Perks, Earned leaves, employees and their family's health insurance and incentives etc. to biobank personnel.

**QC centre:** We will start quality control and certification center for other biobank. Biobank accreditation requirements will be set up to insure that quality assurance and quality control procedures in biobanks.

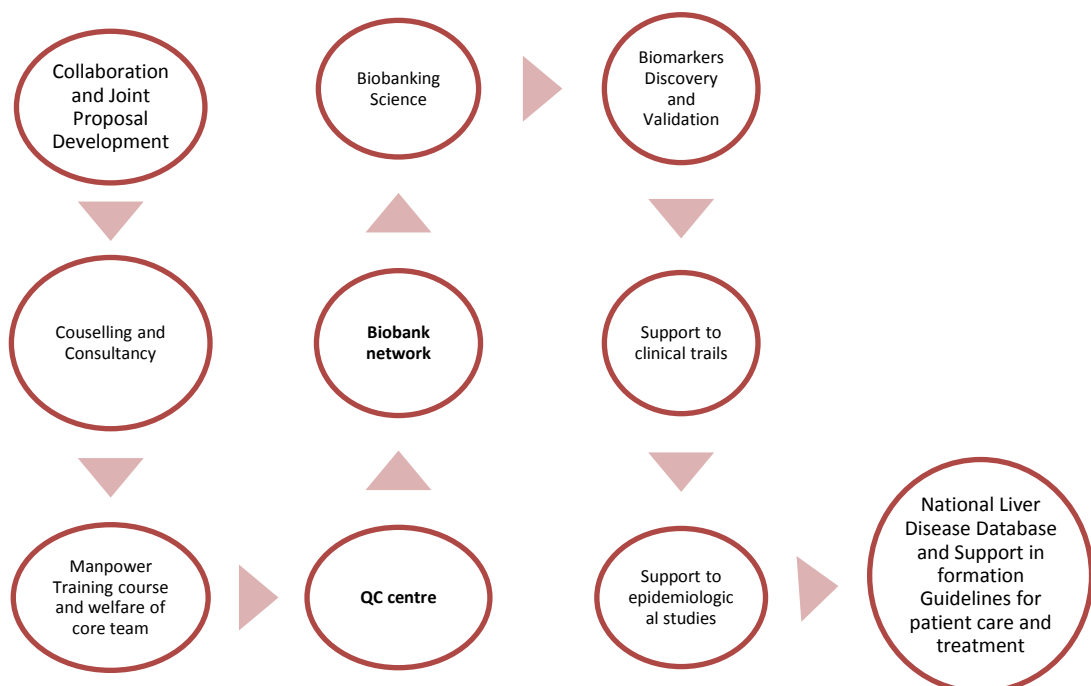
**Biomarker Validation:** By the collection of high quality patient samples with patient clinical, pathologic and outcome data, we will help in the biomarker discovery and validation.

**Biobank network:** We will make biobank network in India, which will accelerate research and save time by providing good quality of samples from each part of country.

**Biobanking based science:** We will be role model in the biobanking science by providing biosample, education, training, counselling, and consultancy.

**Clinical trial:** Biobank resources are important tools in clinical trial. Each clinical trial sample needs to collect, processed, storage space, create databases, develop sample collection protocols. NLDB will help in clinical trial by providing their robust biobank facility.

**Epidemiological study:** Biobanks are a key resource in unravelling the association between genetic background, lifestyle and environmental determinants of the incidence, natural course and treatment response for various complex diseases and health traits. Biobanks are goldmines for epidemiological research, provided that they are set up properly, enable multicentre collaboration, and are available for use by all serious epidemiology groups.



**15.** Any patents applied for: **NO**

**16.** Likelihood of product/process development with time frame.

	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
Biobanking						
Training & Certifications						
Industrial Collaboration & New Project Development						
New Biomarker discovery						
Quality Control Centre for Biobank						
Liver Database Development						
National Programme Development						

### Details of Grant Utilization#

**Table: 6: Equipment Acquired or Placed Order with Actual Cost:**

S. No.	Equipments Acquired or Placed Order	Actual Cost	Status
1	LN2 storage Tanks 50,000 (1.2ml and 2ml) (included all accessories, vials) (qty-2) + Labelling machines & bar-code readers + Oxygen meter with sensor & buzzer + Auto Exhaust Fan	88,42,424.00	Acquired
2	Controlled Rate FREEZER with supply tank of 180 litre	15,06,511.00	Acquired
3	Cryo shipper Holding time 125 days (qty-2)	3,07,000.00	Acquired
4	Cryo shipper Holding time 100 days (qty-2)	3,07,000.00	Acquired
5	Cryo shipper IATA Approved (qty-2)	4,95,000.00	Acquired
6	Shipping Case (qty-2)	89,750.00	Acquired
7	-80°C freezers (with boxes & racks) (qty-3) + Lab Freezers (qty-2)	16,38,423.00	Acquired
8	Lab Refrigerator (190 Ltr)	15,569.00	Acquired
9	Sample Pass Boxes (qty-2)	2,45,000.00	Acquired
10	Biosafety cabinet	3,62,582.00	Acquired
11	Microcentrifuges including refrigerated centrifuges and rotors adaptors	3,10,000.00	Acquired
12	Table top Centrifuges with adaptors	4,80,000.00	Acquired
13	IT (Hardware & Software)	6,55,231.00	Acquired
14	CO2 Incubator	4,00,000.00	Acquired
15	Grossing Station	2,41,500.00	Acquired
16	Cryotome	15,93,000.00	Acquired
17	Microtome	4,07,469.00	Acquired
18	Tissue Processor	3,32,937.00	Acquired
19	Embedding Station	5,64,240.00	Acquired
20	Tissue Microarrayer	3,00,000.00	Under process
21	Microscope	54,626.00	Acquired
22	Automated IHC,IF, ISF Stainer	On reagent rental basis	Acquired
23	Flow Cytometer with sorter	2,14,32,070.00	In transit
24	NGS	2,34,17,859.00	Acquired
25	Mass spectrometric	4,80,00,000.00	In transit
26	-25°C Deep freezer	1,38,600.00	Acquired
27	Liquid Nitrogen Cylinder 250Ltr (qty-2)	4,25,000.00	Acquired
28	Surecast Gel Handcast Bundle BKit with accessories	2,94,000.00	Acquired
29	Gel-Doc System	4,80,000.00	In transit
30	Miscellaneous	4,21,134.00	Acquired
	<b>Total</b>	<b>11,37,56,925.00</b>	

**Table: 7: Manpower Staffing and Expenditure Details:**

S. No.	Manpower	Stipend	Remarks
1	Dr. Birendra Kr. Yadav Biobank Manager	1,35,000/-	
2	Mr. Sushil Kumar Gupta IT-Manager	1,18,000/-	
3	Mr. Koustav Mallick Business Development officer	65,000/-	
4	Mr. Satish Kumar Senior Technical Executive	44,000/-	
5	Mr. Amit Kumar Rathore Junior Technical Executive	29,000/-	
6	Ms. Manpreet Kaur Junior Technical Executive Ms. Pragya Mishra Junior Technical Executive	29,000/- 29,000/-	Left on 01.02.2018 Joined as replacement on 08.02.2018
7	Ms. Shivani Goel Junior Technical Executive	29,000/-	
8	Mr. Indrajeet Kumar Office Executive	25,000/-	
9	Mrs. Rumita Poddar Legal Expert (part time)	20,000/-	
10	Mr. Aftab Accountant (part time)	10,000/-	

Expenditure from 30<sup>th</sup> Aug, 16 to 31<sup>st</sup> Mar, 17: **Nil**

Expenditure in fiscal year 2017-18: **Rs. 19,73,425/-**

Expenditure from 1<sup>st</sup> Apr, 18 to 30<sup>th</sup> Sept, 18: **Rs. 26,45,417/-**

#### **Details of Recurring Expenditure:**

##### **Consumables:**

Expenditure from 30<sup>th</sup> Aug, 16 to 31<sup>st</sup> Mar, 17: **Nil**

Expenditure in fiscal year 2017-18: **Rs. 11,86,266/-**

Expenditure from 1<sup>st</sup> Apr, 18 to 30<sup>th</sup> Sept, 18: **Rs. 5,34,131/-**

##### **Travel:**

Expenditure from 30<sup>th</sup> Aug, 16 to 31<sup>st</sup> Mar, 17: **Nil**

Expenditure in fiscal year 2017-18: **Rs. 31,538/-**

Expenditure from 1<sup>st</sup> Apr, 18 to 30<sup>th</sup> Sept, 18: **Rs. 80,998/-**

##### **Contingency:**

Expenditure from 30<sup>th</sup> Aug, 16 to 31<sup>st</sup> Mar, 17: **Nil**

Expenditure in fiscal year 2017-18: **Rs. 99,207/-**

Expenditure from 1<sup>st</sup> Apr, 18 to 30<sup>th</sup> Sept, 18: **Rs. 12,803/-**

**Financial Requirements for the Next Year with Justifications:****Non-Recurring Requirements:**

S. No.	Equipments Acquired or Placed Order	Sanctioned Cost	Required Cost
1	LN2 storage Tanks 50,000 (1.2ml and 2ml) (included all accessories, vials)	64,90,000.00	64,90,000.00
2	Cryo shipper Holding time 125 days (qty-2)	1,40,000.00	3,07,000.00
3	Cryo shipper Holding time 100 days (qty-2)	1,60,000.00	3,07,000.00
4	Cryo shipper IATA Approved (qty-2)	1,60,000.00	4,95,000.00
5	Shipping Case (qty-2)	60,000.00	89,750.00
6	-80°C freezers (with boxes & racks) (qty-2)	12,40,000.00	12,40,000.00
7	Lab Freezers (qty-2)	43,700.00	43,700.00
8	Cryolabels	1,30,000.00	1,30,000.00
9	IT (Hardware & Software)	5,00,000.00	5,00,000.00
10	Table, Chairs cabinets etc.	2,00,000.00	2,00,000.00
	<b>Total</b>	<b>91,23,700.00</b>	<b>98,02,450.00</b>

**Justification:** Since, most of the equipments are imported and price of US dollar has risen. We are requesting to rise of the funds for item number 2,3,4,5.

**Recurring Requirements:****Manpower:**

S. No.	Name of Post	Sanctioned Monthly salary	Requested monthly salary	Requested Annual salary
1	Tissue Bank Manager	1,35,000	1,77,288	21,27,456
2	IT Manager	1,18,000	1,38,399	16,60,788
3	Business Development	65,000	81,596	9,79,152
4	Senior Technical Executive	44,000	50,521	60,62,52
5	Junior Technical Executive	29,000	34,698	4,16,376
6	Office Executive	25,000	30,729	3,68,748
7	Legal Advisor (Part time)	20,000	20,000	2,40,000
8	Accountant (Part time)	10,000	10,000	1,20,000
	<b>Total</b>	<b>4,46,000</b>	<b>5,43,231</b>	<b>65,18,772</b>

**Justification:** NLDB employees at present availing disparate salary and not as per requested to DBT. Steering committee members recommended that DBT needs to consider the biobank man-power salaries at par ILBS.

**Travel & Contingency:**

S. No.	Budget Head	Sanctioned Amount	Requested Amount
1	Travel	3,00,000	3,00,000
2	Contingency	2,00,000	2,00,000
	<b>Total</b>	<b>5,00,000</b>	<b>5,00,000</b>

**Justification:** It is being requested that the amount deducted from the travel and contingency head under the recurring head in the II year grant, should not be deducted as it can be utilised for outstation travel, accommodations, international travel, registrations, personnel training and biobank advertisement at any point of time. We are not asking for more funds we are just requesting that funds allocated should not be deducted.

**International Travel:** We request to allow one biobank personnel per year for international travel. It will allow us to broaden our knowledge in biobanking.



**Additional Biobank technical staff:** It is hereby requested to extend the technical staff by one more junior level technician. Collaboration and requirement of analytical facilities are increasing day by day hence we request to extend the said manpower at sanctioned salary.

**Total Requested Grant: Rs. 1,68,21,222/-**

*#Grant utilization details (UC&SE, Assets Certificate & manpower details) also required to be submitted separately as per the prescribed format*

**[Signature(s) of the Investigator(s)]**

**Principal Investigator:**

Dr. Chhagan Bihari,  
Associate Professor, Pathology, ILBS

*Chhagan Bihari*  
**Dr. CHHAGAN Bihari**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj,  
New Delhi-110 070

**Co-PI/Co-Investigator:**

Dr. Archana Rastogi,  
Additional Professor, Pathology, ILBS

*Dr. Rastogi*  
**Dr. ARCHANA RASTOGI**  
Additional Professor - Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

Dr. Ekta Gupta,  
Additional Professor, Virology, ILBS

*Ekta Gupta*  
**Dr. EKTA GUPTA**  
Additional Professor - Virology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

Dr. Senthil Kumar,  
Additional Professor,  
HPB and Liver Transplant Surgery, ILBS

*Senthil Kumar*  
**Dr. SENTHIL KUMAR**  
MS, FRCS (Ed), FRCS (Hepatobiliary), UK  
Additional Professor (Liver Transplantation)  
Institute of Liver and Biliary Sciences  
D-1, Vasant Kunj, New Delhi-110070

Dr. Shvetank Sharma,  
Associate Professor, MCM Department ILBS

*S. Sharma*

Dr. Rakhi Maiwall,  
Associate Professor, Hepatology, ILBS

**Instructions:**

- (i) All the information needs to be provided, otherwise the Progress Report will be treated as incomplete. In case of 'Nil' / 'Not Applicable' information, the same may be indicated.
- (ii) In case of multicentric project, a combined Progress Report should be submitted incorporating the progress of all components. The Project Co-coordinator/ PI will be responsible for this.
- (iii) \*Please indicate the reporting period (i.e. Year 1/2/3/4/5).
- (iv) Submission of Progress Report by the end of the 11<sup>th</sup> month of grant sanction is linked with further continuation of the project and timely release of funds for the next year.

## Annexure - 1

S. No.	Clinical Diagnosis	PBMC	Plasma	Tissue	serum	FFP	Urine
1	Acute Hepatitis: (A/ B/ E/)	0/2/0	0/5/0	0/1/0	0/84/0		
2	Chronic Hepatitis:(B/ C/ E)				5/43/0		
3	Vascular (NCPH(F)/[Budd-Chiari+HVOTO]/EHPVO	0/4/8	0/12/27	0/0/1			
4	Autoimmune (AIH/PBC/ PSC)	52/0/0	270/0/0	7/0/0		1/0/0	
5	Cirrhosis(Alcoholic/HBV/HCV/NASH+ NAFLD/Cryptogenic/Autoimmune/ Wilson/CLD	150/38/10/194 /115/0/0/216	470/125/46/620/4 02/0/726	10/2/0/8/8/30/ 0/10	8/4/5/8/0/0/ 0/18	0/0/0/1/2 /0/0/2	
6	ACLF	108	405	13	5		
7	Healthy donor				9558		90
8	Malignancy						39
	Total	897	3108	90	9738	6	129

**Total number of aliquots =13968 until 10.11.2018**

**Annexure-2(A)**
**Service Agreement**
**Storage**

S. no	PI Name	Institution's & department name	Project Title	Service start date	Service end Date
1	Dr. Sanal MG, Assistant Professor	Dept. of Molecular and Cellular Medicine, ILBS	"Gene Correction nad Disease Modelling using iPSC Derived from Progressive Familial Intrahepatic Cholestasis Patients" (46)	29/03/2018	15/04/2023
2	Dr. Shvetank Sharma, Associate Professor	Dept. of Molecular and Cellular Medicine, ILBS	Role of Mitochondrial Import Machinery Proteins SAM50 and TOM40 in Regulation of Hepatocellular Carcinoma (40)	03/05/2018	04/05/2023
3	Dr. Mohammad Shabir Hussain, Post Doctorate Fellow	Dept. of Molecular and Cellular Medicine, ILBS	Proteomics Study of Drug Induced Liver Injury (DILI) for Identification of Non Mvaslve Biomarkers (54)	08/05/2018	07/05/2023
4	Dr. Shantanu Dube, Assistant Head Operations	AHO(Medical), ILBS	Healthy Liver Healthy Delhi (Mylan sponsor)	15/05/2018	
5	Dr. Sukriti, Senior Research Fellow	Dept. of Molecular and Cellular Medicine, ILBS	Therapeutic implications of S1P in Liver regeneration and vascular remodelling in Hepatopulmonary Syndrome (63)	08/08/2018	07/08/2019
	Prof. Vijay Kumar	Dept. of Molecular and Cellular Medicine, ILBS	J.C. Bose fellowship From SERB (58)	20.9.2018	
6	Dr. Chhagan Bihari, Associate Professor	Pathology, ILBS	Identification of Biomarkers for Diagnosis and Prognosis of Autoimmune Hepatitis (41)	1.8.2018	20.9.2019
7	Dr. Jaya Benjamin	Nutrition, ILBS	Characterization of body composition in patients with NAFLD and its association with known risk factors in lean and obese NAFLD.	24/07/2018	
8	Prof. Shiv Kumar Sarin	Hepatology, ILBS	Handover through Dr. Nirupma GBPH DATA		
9	Prof. Shiv Kumar Sarin	Hepatology, ILBS	HVPG/TJLB/TIPS Procedure	10.10.2018	11.10.2023

**Analytical facility**

1	Dr. Anupam Kumar Assistant Professor	Dept. of Molecular and Cellular Medicine, ILBS	Development of Non-Transplant Therapeutic Strategies For Advanced Liver Disease Phase - 1	7.8.18	07/08/2019
2	Dr. Prem	INMAS		20.7.18	
3	Dr. Raj Kumar	Scientist Radiation Biotechnology Lab, INMAS		18.7.18	

**Annexure-2(B)****Collaborative Project**

<b>S. no.</b>	<b>PI Name</b>	<b>Institution's &amp; department name</b>	<b>Project Title</b>	<b>Funding Agency</b>
1	Prof. Yuba Raj Pokharel	South Asian University	Deciphering the role of PIN1 interacting proteins SUPT5H as a novel cancer biomarker by using CRISPR/Cas9 gene editing tool	CSIR
2	Prof. Yuba Raj Pokharel	South Asian University	Characterizing the Novel Tumor Suppressor gene Polyglutamine-Binding Protein-1 (PQBP1) in cancer	SERB/DST
3	Dr. Chhagan Bihari	ILBS	Characterisation and identification of extracellular vesicles for liquid Biopsies in diagnosis of AIH	DBT
4	Dr. Chhagan Bihari	ILBS	To Investigate role of Gut dybiosis in liver graftDysfunction	IYBA
5	Ms. Deeepika	ILBS	To discern the mechanism of macrocytic anemia in alcoholic liver disease	DST
6	Ms. SADAF KHAN	ILBS	Identification and characterization of myeloid blasness in ACLF	DST
7	Ms. Radhika Kapil	ILBS	To Characterise the circulating immunoglobulins in cirrhosis	DST

P  
31/11/18

Annexure - 3

30<sup>th</sup> October, 2018

Dear Prof. Sarin,

This is with reference to your letter dated 17<sup>th</sup> October, 2018, informing about the National Liver Disease Biobank facility for clinical and basic research in the field of liver and biliary diseases established at ILBS, New Delhi. We are very happy to know that this facility could be used as National Biobank Facility for storage of bio samples with advanced analytical facilities, including cell sorter, high resolution MS, NGS and pathology services.

We will be very happy to do the outreach through our schemes to maximize the usage of this facility and specifically write to all our PIs working in related areas to make use of the facility for their research.

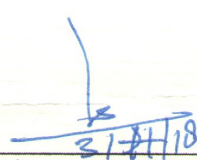
With warm regards,

Yours sincerely,

  
( Rajiv K. Tayal )

**Prof. S.K. Sarin**  
Director  
Institute of Liver and Biliary Sciences  
D-1, Vasant Kunj  
New Delhi-110070

Dr. Chhagan

  
31/11/18

विज्ञान और इंजीनियरी अनुसंधान बोर्ड (विज्ञान और प्रौद्योगिकी विभाग, भारत सरकार का एक सांविधिक निकाय)

**SCIENCE & ENGINEERING RESEARCH BOARD** (A Statutory body of Department of Science and Technology, Govt. of India)

5 एवं 5A, निचला भूतल, वसंत स्क्वॉयर मॉल, वसंत कुंज, नई दिल्ली - 110070 भारत  
5 & 5A, Lower Ground Floor, Vasant Square Mall, Sector-B, Pocket-5, Vasant Kunj, New Delhi-110 070 INDIA  
P: +91 11 40000303 | F: +91 11 46003041 | E : secretary.serb@nic.in | W : www.serb.gov.in



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**UTILISATION CERTIFICATE**  
(for the financial year ending 31st March 2017)

(Rs. 1360.51202 in lakhs)

1. Title of the project/scheme : **"Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS" renamed as "National Liver Disease Biobank"**
2. Name of the Organization: **INSTITUTE OF LIVER & BILIARY SCIENCE**
3. Principal Investigator : **Dr. Chhagan Bihari**
4. Deptt. of Biotechnology sanction order No. & date of sanctioning the project: **SAN. No. 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016 & SAN. No. 102 / IFD / SAN / 2005 / 2016-2017 dated 10-08-2016 (partially modified on 13.02.2017)**
5. Amount brought forward from the previous financial year quoting DBT letter No. & date in which the authority to carry forward the said amount was given : **First Grant**
6. Amount received from DBT during the financial year (Please give No. and dates of sanction orders showing the amounts paid) : **13,60,51,202/-**  
**SAN. No. 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016, S. No. 49 and SAN. No. 102 / IFD / SAN / 2005 / 2016-2017 dated 10-08-2016 (partially modified on 13.02.2017), S. No. 48**
7. Other receipts/interest earned, if any, on the DBT grants : **Rs. 20,66,569/-**
8. Total amount that was available for expenditure during the financial year (Sl. nos. 5, 6 and 7) : **13,81,17,771/-**
9. Actual expenditure (excluding commitments) incurred during the financial year (statement of expenditure is enclosed ) : **46,86,000/-**
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 : **13,34,31,771/-**
12. Amount allowed to be carried forward to the next financial year vide letter No. & date : **13,34,31,771/-**
1. Certified that the amount of Rs. **46,86,000/-** mentioned against col. 9 has been utilised on the project / scheme for the purpose for which it was sanctioned and that the balance of Rs. **13,34,31,771/-** remaining unutilized at the end of the year has been surrendered to Govt. (Vide No. **Nil** dated **Nil**) / will be adjusted towards the grants-in-aid payable during the next year.

*Chhagan Bihari*

*[Signature]*




2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.


Kinds of checks exercised:

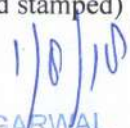
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- 2.
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- 5.

**Dr. CHHAGAN BIHARI**  
Pl. National Liver Disease Biobank  
Associate Professor Pathology  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj New Delhi-110070  
**(PROJECT INVESTIGATOR)**  
(Signed and stamped)

  
**(FINANCE OFFICER)**  
(Signed and stamped)

 27/7/2018  
**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT. Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070

  
**(HEAD OF THE INSTITUTE)**  
(Signed and stamped)

 1/8/18  
**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 30th August 2016 to 31st March 2017

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non –Recurring</b>	0	12,34,20,202	20,66,569	12,34,20,202 + 2066569 = 12,54,86,771	Nil	12,54,86,771	Interest received in column 4
<b>(i) Equipments</b>							
<b>2. Recurring</b>							
(i) Human Resource	0	60,48,000	0	60,48,000	Nil	60,48,000	None
ii) Consumables	0	11,97,000	0	11,97,000	Nil	11,97,000	None
(iii) Travel	0	5,00,000	0	5,00,000	Nil	5,00,000	None
(iv) Contingency	0	2,00,000	0	2,00,000	Nil	2,00,000	None
(v) Overheads (if applicable)	0	46,86,000	0	46,86,000	46,86,000	0	None
<b>Total :</b>	<b>Nil</b>	<b>13,60,51,202</b>	<b>20,66,569/-</b>	<b>13,81,17,771</b>	<b>46,86,000</b>	<b>13,34,31,771</b>	

*Chhagan Bihari*  
**Dr. CHHAGAN BIHARI**  
(PROJECT INVESTIGATOR)  
PI, National Liver Disease Biobank  
Associate Professor Pathology  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj

*Anil Agarwal*  
**(HEAD OF THE INSTITUTE)**

*1/0/10*  
**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
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D-1, Vasant Kunj, New Delhi-110070

*Vivek Pai*  
**(FINANCE OFFICER)**

*27/5/2018*  
**Dy. Manager (Finance & Accounts)**  
Institute of Liver and Biliary Sciences  
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Sector D-1, Vasant Kunj,  
New Delhi-110070

**UTILISATION CERTIFICATE**  
(for the financial year ending 31st March 2018)  
(Rs. 1334.31771 in lakhs)

1. Title of the project/scheme : **"Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS" renamed as "National Liver Disease Biobank"**
2. Name of the Organization: **INSTITUTE OF LIVER & BILIARY SCIENCE**
3. Principal Investigator : **Dr. Chhagan Bihari**
4. Deptt. of Biotechnology sanction order No. & date of sanctioning the project: **SAN. No. 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016 & SAN. No. 102 / IFD / SAN / 2005 / 2016-2017 dated 10-08-2016 (partially modified on 13.02.2017)**
5. Amount brought forward from the previous financial year quoting DBT letter No. & date in which the authority to carry forward the said amount was given : **13,34,31,771/-**
6. Amount received from DBT during the financial year *(Please give No. and dates of sanction orders showing the amounts paid)* : **Nil**
7. Other receipts/interest earned, if any, on the DBT grants : **Rs. 56,00,060/-**
8. Total amount that was available for expenditure during the financial year (Sl. nos. 5, 6 and 7) : **13,90,31,831/-**
9. Actual expenditure (excluding commitments) incurred during the financial year *(statement of expenditure is enclosed)* : **4,60,77,489/-**
10. Unspent balance refunded, if any *(Please give details of cheque No. etc.)*: **9,29,54,342/-**
11. Balance amount available at the end of the financial year : **9,29,54,342/-**
12. Amount allowed to be carried forward to the next financial year vide letter No. & date : **9,29,54,342/-**
1. Certified that the amount of **Rs. 4,60,77,489/-** mentioned against col. 9 has been utilised on the project / scheme for the purpose for which it was sanctioned and that the balance of **Rs. 9,29,54,342/-** remaining unutilized at the end of the year has been surrendered to Govt. (Vide No. **Nil** dated **Nil**) / will be adjusted towards the grants-in-aid payable during the next year.

*Chhagan Bihari*

*[Signature]*




- 64
2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.


Kinds of checks exercised:

- 1.
- 2.
- 3.
- 4.
- 5.

**Dr. CHHAGAN BIHARI**  
PI, National Liver Disease Biobank  
Associate Professor Pathology  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj New Delhi-110070  
(PROJECT INVESTIGATOR)  
(Signed and stamped)

  
(FINANCE OFFICER)  
(Signed and stamped)  
27/7/2018

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT, Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070

  
(HEAD OF THE INSTITUTE)  
(Signed and stamped)

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 1st April 2017 to 31st March 2018

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non –Recurring</b>	12,54,86,771	0	55,72,758	12,54,86,771 +55,72,758 =13,10,59,529	4,27,87,053	8,82,72,476	Showing interest in column 4
<b>2. Recurring</b>							
(i) Human Resource	60,48,000	0	0	60,48,000	19,73,425	40,74,575	
ii) Consumables	11,97,000	0	0	11,97,000	11,86,266	10,734	
(iii) Travel	5,00,000	0	0	5,00,000	31,538	4,68,462	
(iv) Contingency	2,00,000	0	27,302	2,27,302	99,207	1,28,095	Application fees received in column 4
(v) Overheads (if applicable)	0	0		0	0	0	
<b>Total :</b>	<b>13,34,31,771</b>	<b>Nil</b>	<b>56,00,060</b>	<b>13,90,31,831</b>	<b>4,60,77,489</b>	<b>9,29,54,342</b>	

*Chhagan Bihari*  
**(PROJECT INVESTIGATOR)**

**DR. CHHAGAN BIHARI**  
PI, National Liver Disease Biobank  
Associate Professor Pathology  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj

*Anil Agarwal*  
**(HEAD OF THE INSTITUTE)**

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
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*Vivek Pai*  
**(FINANCE OFFICER)**

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT, Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070

**UTILISATION CERTIFICATE**  
(for the financial year ending 30th June 2018)  
(Rs. 929.54342 in lakhs)

1. Title of the project/scheme : **"Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS" renamed as "National Liver Disease Biobank"**
  2. Name of the Organization: **INSTITUTE OF LIVER & BILIARY SCIENCE**
  3. Principal Investigator : **Dr. Chhagan Bihari**
  4. Deptt. of Biotechnology sanction order No. & date of sanctioning the project: **SAN. No. 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016 & SAN. No. 102 / IFD / SAN / 2005 / 2016-2017 dated 10-08-2016 (partially modified on 13.02.2017)**
  5. Amount brought forward from the previous financial year quoting DBT letter No. & date in which the authority to carry forward the said amount was given : **9,29,54,342/-**
  6. Amount received from DBT during the financial year (Please give No. and dates of sanction orders showing the amounts paid) : **Nil**
  7. Other receipts/interest earned, if any, on the DBT grants : **13,91,094/- (Till 30<sup>th</sup> June, 2018)**
  8. Total amount that was available for expenditure during the financial year (Sl. nos. 5, 6 and 7) : **9,43,45,435/-**
  9. Actual expenditure (excluding commitments) incurred during the financial year (statement of expenditure is enclosed) : **7,22,88,143/- (Till 30<sup>th</sup> June, 2018)**
  10. Unspent balance refunded, if any (Please give details of cheque No. etc.): **2,20,57,293/- (Till 30<sup>th</sup> June, 2018)**
  11. Balance amount available at the end of the financial year : **2,20,57,293/- (Till 30<sup>th</sup> June, 2018)**
  12. Amount allowed to be carried forward to the next financial year vide letter No. & date : **2,20,57,293/- (Till 30<sup>th</sup> June, 2018) carried forward till 31<sup>st</sup> March, 2019.**
1. Certified that the amount of **Rs. 7,22,88,143/-** mentioned against col. 9 has been utilised on the project / scheme for the purpose for which it was sanctioned and that the balance of **Rs. 2,20,57,293/- (Till 30<sup>th</sup> June, 2018)** remaining unutilized at the end of the year has been surrendered to Govt. (Vide No. **Nil** dated **Nil**) / will be adjusted towards the grants-in-aid payable during the next year.

*Chhagan Bihari*

*[Signature]*



2. Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilised for the purpose for which it was sanctioned.


Kinds of checks exercised:

- 1.
- 2.
- 3.
- 4.
- 5.

**Dr. CHHAGAN BIHARI**  
PI, National Liver Diseases Bank  
Associate Professor Pa  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj New Delhi  
**(PROJECT INVESTIGATOR)**  
(Signed and stamped)

  
**(HEAD OF THE INSTITUTE)**  
(Signed and stamped)

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

  
**(FINANCE OFFICER)** 27/7/2018  
(Signed and stamped)  
**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
Sector 15, Vasant Kunj, New Delhi-110070



**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 1st April 2018 to 30th June 2018

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non –Recurring</b>	8,82,72,476	0	13,91,094	8,82,72,476 +13,91,094 =8,96,63,570	7,07,13,404	1,89,50,166	Interest received in column 4
(i) Equipments							
<b>2. Recurring</b>							
(i) Human Resource	40,74,575	0	0	40,74,575	12,42,117	28,32,458	None
ii) Consumables	10,734	0	0	10,734	3,13,258	-3,02,524	Balance in negative
(iii) Travel	4,68,462	0	0	4,68,462	16,144	4,52,318	None
(iv) Contingency	1,28,095	0	0	1,28,095	3,220	1,24,875	None
(v) Overheads (if applicable)	0	0	0	0	0	0	None
<b>Total :</b>	<b>9,29,54,342</b>	<b>Nil</b>	<b>13,91,094</b>	<b>9,43,45,435</b>	<b>7,22,88,143</b>	<b>2,20,57,293</b>	

**Dr. CHHAGAN BIHARI**  
Pr. National Liver Disease Biobank  
(PROJECT INVESTIGATOR)  
Institute of Liver & Biliary Sciences  
D-1, Vasant Kunj New Delhi-110070

(HEAD OF THE INSTITUTE)

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

(FINANCE OFFICER)

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT, Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070

**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 30th August 2016 to 31st March 2017

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non -Recurring</b>	0	12,34,20,202	0	12,34,20,202	Nil	12,34,20,202	None
(i) Equipments							
<b>2. Recurring</b>							
(i) Human Resource	0	60,48,000	0	60,48,000	Nil	60,48,000	None
(ii) Consumables	0	11,97,000	0	11,97,000	Nil	11,97,000	None
(iii) Travel	0	5,00,000	0	5,00,000	Nil	5,00,000	None
(iv) Contingency	0	2,00,000	0	2,00,000	Nil	2,00,000	None
(v) Overheads (if applicable)	0	46,86,000	0	46,86,000	46,86,000	0	None
Other (Interest) received	0	0	20,66,569	20,66,569	Nil	20,66,569	Interest received in column 4
<b>Total :</b>	<b>Nil</b>	<b>13,60,51,202</b>	<b>20,66,569/-</b>	<b>13,81,17,771</b>	<b>46,86,000</b>	<b>13,34,31,771</b>	

*Chhagan Bihari*  
**(PROJECT INVESTIGATOR)**

**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*30/3/18 11/9/18*  
**(HEAD OF THE INSTITUTE)**  
**Dr. ANIL AGARWAL**  
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D-1, Vasant Kunj, New Delhi-110070

*Vivek Pai*  
**(FINANCE OFFICER)** 11/9/2018

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj,  
New Delhi-110 070.



**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 1st April 2017 to 31st March 2018

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non -Recurring</b>	12,34,20,202	0	0	12,34,20,202	4,27,87,053	8,06,33,149	
(i) Equipments							
<b>2. Recurring</b>							
(i) Human Resource	60,48,000	0	0	60,48,000	19,73,425	40,74,575	
(ii) Consumables	11,97,000	0	0	11,97,000	11,86,266	10,734	
(iii) Travel	5,00,000	0	0	5,00,000	31,538	4,68,462	
(iv) Contingency	2,00,000	0	27,302	2,27,302	99,207	1,28,095	Application fees received in column 4
(v) Overheads (if applicable)	0	0	0	0	0	0	
Other (Interest) received	20,66,569	0	55,72,758	76,39,327	0	76,39,327	Showing interest in column 4
<b>Total :</b>	<b>13,34,31,771</b>	<b>Nil</b>	<b>56,00,060</b>	<b>13,90,31,831</b>	<b>4,60,77,489</b>	<b>9,29,54,342</b>	

*Chhagan Bihari*  
**(PROJECT INVESTIGATOR)**

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Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*Anil Agarwal*  
**(HEAD OF THE INSTITUTE)**

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

*Vivek Pai*  
**(FINANCE OFFICER)** 11/9/2018

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj,  
New Delhi-110 070.

**Statement of Expenditure referred to in para 9 of the  
Utilisation Certificate**

Showing grants received from the Department of Biotechnology and the expenditure incurred during the period from 1st April 2018 to 30th June 2018

Item	Unspent Balance Carried forward from previous year	Grants received from DBT during the year	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)	Remark
1	2	3	4	5	6	7	8
<b>1. Non -Recurring</b>	8,06,33,149	0	0	8,06,33,149	7,07,13,404	99,19,745	None
(i) Equipments							
<b>2. Recurring</b>							
(i) Human Resource	40,74,575	0	0	40,74,575	12,42,117	28,32,458	None
(ii) Consumables	10,734	0	0	10,734	3,13,258	-3,02,524	Balance in negative
(iii) Travel	4,68,462	0	0	4,68,462	16,144	4,52,318	None
(iv) Contingency	1,28,095	0	0	1,28,095	3,220	1,24,875	None
(v) Overheads (if applicable)	0	0	0	0	0	0	None
Other (Interest) received	76,39,327	0	13,91,094	90,30,421	0	90,30,421	Showing interest in column 4
<b>Total :</b>	<b>9,29,54,342</b>	<b>Nil</b>	<b>13,91,094</b>	<b>9,43,45,436</b>	<b>7,22,88,143</b>	<b>2,20,57,293</b>	

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)

**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*Anil Agarwal*  
(HEAD OF THE INSTITUTE)

**Dr. ANIL AGARWAL**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

*Vivek Pai* 11/9/2018  
(FINANCE OFFICER)

**VIVEK PAI**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj,  
New Delhi-110 070.



## Assets Acquired Format

Assets acquired wholly or substantially out of Govt. grant Register to be maintained by Grantee Institution

Name of the Sanctioning Authority: Department of Biotechnology

1. S. No.: 49
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016 &  
no (BT/PR7403/MED/29/657/2012) Dated: 30.8.2016.
4. Amount of the sanctioned NR grant: Rs. 12,34,20,202/- (Twelve Crores Thirty Four Lakhs Twenty Thousand Two Hundred Two Only)
5. Brief purpose of grant: Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in the grant-in-aid sanction order: Not Applicable
7. Particulars of assets actually created or acquired: Details as per "details of equipment procured during the period"
8. Value of Assets as on 31<sup>st</sup> March 2017: Nil
9. Purpose for which utilised as present: Cryostorage and Analytical facility for National Liver Disease Biobank
10. Encumbered or not: No
11. Reasons, if encumbered: Not Applicable
12. Disposed of or not: Not Applicable
13. Reasons and authority, if any for disposal: Not Applicable
14. Amount realised on disposal: Not Applicable
15. Remarks: \_\_\_\_\_

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)  
SIGNATURE

**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*Dr. Anil Kumar*  
(HEAD OF THE INSTITUTE)  
SIGNATURE & STAMP

**Dr. ANIL KUMAR**  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

*D.R. Verma*  
(FINANCE OFFICER)  
SIGNATURE & STAMP

**D.R. VERMA**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT. Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070

## Details of Equipment Procured During the Period (2016-17)

S. No.	Name of Equipment	Sanctioned Cost	Actual Cost (factual figure, not in lakh)	Date of placing order	Date of Receiving Equipment	Remark/Payment voucher No. with date (Copy of Payment Voucher may please be enclosed)	Reasons for fluctuation in price
1	2	3	4	5	6	7	
1	LN2 Storage Tanks 50,000 (capacity 1.2 and 2ml) all required inventory system, LN2 supply cylinders & accessories -7 (included all accessories, vials)	1,29,80,000	-	-	-	-	-
2	Controlled Rate FREEZER with supply tank of 180 litre + insulated hose and racks	18,75,000	-	-	-	-	-
3	Cryo shipper Holding time 125 days	1,40,000	-	-	-	-	-
4	Cryo shipper Holding time 100 days	1,60,000	-	-	-	-	-
5	Cryo shipper IATA Approved	1,60,000	-	-	-	-	-
6	Shipping Case	60,000	-	-	-	-	-
7	LN2 Bucket	61,000	-	-	-	-	-
8	-80°C Freezers -10 with inventory system Boxes, racks	12,40,000	-	-	-	-	-
9	Lab Freezers	43,700	-	-	-	-	-
10	Sample Pass Boxes	3,34,002	-	-	-	-	-
11	Biosafety cabinet	9,60,000	-	-	-	-	-
12	Microcentrifuges including refrigerated centrifuges and rotors adaptors-I	2,80,000	-	-	-	-	-
13	Table top Centrifuges with adaptors	4,23,000	-	-	-	-	-
14	Micro ultracentrifuge	19,00,000	-	-	-	-	-
15	Labelling machines & bar-code readers	1,30,000	-	-	-	-	-
16	Cryolables	2,60,000	-	-	-	-	-
17	Computerised support systems: hardware, advanced tissue bank software and web site maintenance and networking, Cryomonitor software	25,50,000	-	-	-	-	-

Signature

13/9/18

(2016-17)

32/c

18	CO2 Incubator	5,59,500	-	-	-	-	-
19	RT-PCR	20,00,000	-	-	-	-	-
20	Grossing Station	6,40,000	-	-	-	-	-
21	Cryotome	11,68,000	-	-	-	-	-
22	Microtome	4,97,000	-	-	-	-	-
23	Tissue Processor	11,00,000	-	-	-	-	-
24	Embedding Station	9,00,000	-	-	-	-	-
25	Tissue Microarrayer	3,00,000	-	-	-	-	-
26	Microscope	8,66,000	-	-	-	-	-
27	Automated IHC, IF, ISF Stainer	28,33,000	-	-	-	-	-
28	Flow Cytometer with sorter	1,98,00,000	-	-	-	-	-
29	NGS	1,91,00,000	-	-	-	-	-
30	Mass spectrometric	4,96,00,000	-	-	-	-	-
31	Table Chairs, bench archiving cabins, racks, cabinet stationery, cupboards	5,00,000	-	-	-	-	-
<b>Total</b>		<b>12,34,20,202</b>	<b>Nil</b>				

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)  
SIGNATURE & STAMP

**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*Dr. Anil Agarwal*  
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**Dr. ANIL AGARWAL**  
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*D.R. Verma*  
13.8.18  
(FINANCE OFFICER)

SIGNATURE & STAMP  
**D.R. VERMA**

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New Delhi-110070



## Assets Acquired Format

Assets acquired wholly or substantially out of Govt. grant Register to be maintained by Grantee Institution

Name of the Sanctioning Authority: Department of Biotechnology

1. S. No.: 49
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016  
BT/PR7403/MED/29/657/2012 Dated: 30.8.2016
4. Amount of the sanctioned NR grant: Rs. 12,34,20,202/- (Twelve Crores Thirty Four Lakhs Twenty Thousand Two Hundred Two Only)
5. Brief purpose of grant: Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in the grant-in-aid sanction order: Not Applicable
7. Particulars of assets actually created or acquired: Details as per "details of equipment procured during the period"
8. Value of Assets as on 31<sup>st</sup> March 2018: Rs. 4,27,87,053/-
9. Purpose for which utilised as present: Cryostorage and Analytical facility for National Liver Disease Biobank
10. Encumbered or not: No
11. Reasons, if encumbered: Not Applicable
12. Disposed of or not: Not Applicable
13. Reasons and authority, if any for disposal: Not Applicable
14. Amount realised on disposal: Not Applicable
15. Remarks: \_\_\_\_\_

Chhagan Bihari  
(PROJECT INVESTIGATOR)  
SIGNATURE

Dr. CHHAGAN BIHARI  
Associate Professor, Pathology  
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Anil Agarwal  
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D.R. Verma  
13.8.18  
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27/c

# Details of Equipment Procured During the Period (2017-18)

S. No.	Name of Equipment	Sanctioned Cost	Actual Cost (factual figure, not in lakh)	Date of placing order	Date of Receiving Equipment	Remark/Payment voucher No. with date (Copy of Payment Voucher may please be enclosed)	Reasons for fluctuation in price
1	2	3	4	5	6	7	
1	LN2 Storage Tanks 50,000 (capacity 1.2 and 2ml) all required inventory system, LN2 supply cylinders & accessories -7 (included all accessories, vials)	1,29,80,000	90,52,468.00	23.12.17 06.03.18	29.05.18 21.05.18	PO No. 66241, 66244, 68186	Through tender process and price negotiation meeting
2	Controlled Rate FREEZER with supply tank of 180 litre + insulated hose and racks	18,75,000	15,06,511.37	15.11.17	29.05.18	PO No. 65352	Through tender process and price negotiation meeting
3	Cryo shipper Holding time 125 days	1,40,000	3,07,000.00	25.4.17	04.09.17	PO No. 60026	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
4	Cryo shipper Holding time 100 days	1,60,000	3,07,000.00	25.4.17	04.09.17	PO No. 60027	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
5	Cryo shipper IATA Approved	1,60,000	4,95,000.00	20.4.17	04.09.17	PO No. 59855	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
6	Shipping Case	60,000	89,750.00	07.03.18	23.06.18	PO No. 68217	Higher version
7	LN2 Bucket	61,000	0				In process

Attested by  
B. S. H. S.

13/5/18

(2017-18)

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8	-80°C Freezers -10 with inventory system Boxes, racks	12,40,000	16,38,423.00	03.11.17	11.04.18	PO No. 65067	2 Sanctioned, 3 purchased (includes 2 lab freezers) Through tender process and price negotiation meeting
9	Lab Freezers	43,700	0	03.11.17	11.04.18	PO No. 65067	Purchased with -80 deep freezer
10	Sample Pass Boxes	3,34,002	2,45,000.00	13.02.18	21.05.18	PO No. 67579	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased (3 sanctioned, 2 purchased)
11	Biosafety cabinet	9,60,000	3,62,582.00	25.4.17	10.08.17	PO No. 60042	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased (2 sanctioned, 1 Purchased)
12	Microcentrifuges including refrigerated centrifuges and rotors adaptors-I	2,80,000	3,10,000.00	11.7.17	19.12.17	PO No. 61794	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
13	Table top Centrifuges with adaptors	4,23,000	4,80,000.00	10.03.18	In transit	PO No. 68306	As per institutional policy 3 quotations invited and based on previous order & L1 purchased
14	Micro ultracentrifuge	19,00,000	0				In process
15	Labelling machines & bar-code readers	1,30,000	0	23.12.17	29.05.18	PO No. 66244	Purchased with LN2 Storage Tanks
16	Cryolables	2,60,000	0	23.12.17	29.05.18	PO No. 66244	Purchased with LN2 Storage Tanks

G. K. S. B. B. B.

13/8/18

(2017-18)

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17	Computerised support systems: hardware, advanced tissue bank software and web site maintenance and networking, Cryomonitor software	25,50,000	7,97,814.5	20.11.17, 14.02.18, 11.10.17, 14.02.18,	21.02.18, 30.10.18, 21.02.18,	PO No. 67618, 65516, 64555, 67619  Work order No. F5.4(81)2016-17/PUR/ILBS(CID-11135)/42059	Hardware and Software requires integration with instruments so the hardware and software is kept on hold so that it can be integrated (Includes Advertisement for biobank recruitment 3,02,889)
18	CO2 Incubator	5,59,500	4,00,000.00	11.07.17	17.10.17	PO No. 61802	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
19	RT-PCR	20,00,000	0				In process
20	Grossing Station	6,40,000	0				In process
21	Cryotome	11,68,000	15,93,000.00	6.11.17	25.01.18	PO No. 65077	Through tender process
22	Microtome	4,97,000	4,07,469.00	12.05.17	07.07.17	PO No. 60524	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
23	Tissue Processor	11,00,000	3,32,937.00	28.11.17	09.02.18	PO No.65659	Through tender process
24	Embedding Station	9,00,000	5,64,240.00	10.11.17	06.11.17	PO No. 65168	Through tender process
25	Tissue Microarrayer	3,00,000	0				In process
26	Microscope	8,66,000	0				In process
27	Automated IHC,IF, ISF Stainer	28,33,000	0				In process
28	Flow Cytometer with sorter	1,98,00,000	0				In process
29	NGS	1,91,00,000	2,34,17,858.50	04.12.17	In transit	PO No. 65792	Through tender process and multiple price negotiation meetings and L1 considered
30	Mass spectrometric	4,96,00,000	0				In process

G. K. S. Pillai

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(2017-18)

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31	Table Chairs, bench archiving cabins, racks, cabinet stationery, cupboards	5,00,000	4,80,000	06.03.18,	In transit	PO No. 68185	Purchased Equipment (Gel-Doc System) necessary for functioning of biobank
<b>Total</b>		<b>12,34,20,202</b>	<b>4,27,87,053</b>				

*Chhagan Bihari*

(PROJECT INVESTIGATOR)

SIGNATURE & STAMP

**Dr. CHHAGAN BIHARI**

Associate Professor, Pathology  
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*31/1/18*

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*D.R. Verma*  
*13/8/18*

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**D.R. VERMA**

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**Assets Acquired Format**

Assets acquired wholly or substantially out of Govt. grant Register to be maintained by Grantee Institution

Name of the Sanctioning Authority: Department of Biotechnology

1. S. No.: 49
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2007 / 2016-2017 dated 10-08-2016  
No (BT/PR7403/MED/29/657/2012) dtd 30.08.2016
4. Amount of the sanctioned NR grant: Rs. 12,34,20,202/- (Twelve Crores Thirty Four Lakhs Twenty Thousand Two Hundred Two Only)
5. Brief purpose of grant: Setting up the Tissue bank facility for clinical and basic research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in the grant-in-aid sanction order: Not Applicable
7. Particulars of assets actually created or acquired: Details as per "details of equipment procured during the period"
8. Value of Assets as on 30<sup>th</sup> June 2018: Rs. 7,07,13,404/-
9. Purpose for which utilised as present: Cryostorage and Analytical facility for National Liver Disease Biobank
10. Encumbered or not: No
11. Reasons, if encumbered: Not Applicable
12. Disposed of or not: Not Applicable
13. Reasons and authority, if any for disposal: Not Applicable
14. Amount realised on disposal: Not Applicable
15. Remarks: \_\_\_\_\_

Chhagan Bihari  
(PROJECT INVESTIGATOR)  
SIGNATURE

**Dr. CHHAGAN BIHARI**  
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New Delhi-110070

# Details of Equipment Procured During the Period (April 2018 - June 30th 2018)

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S. No.	Name of Equipment	Sanctioned Cost	Actual Cost (factual figure, not in lakh)	Date of placing order	Date of Receiving Equipment	Remark/Payment voucher No. with date (Copy of Payment Voucher may please be enclosed)	Reasons for fluctuation in price
1	2	3	4	5	6	7	
1	LN2 Storage Tanks 50,000 (capacity 1.2 and 2ml) all required inventory system, LN2 supply cylinders & accessories -7 (included all accessories, vials)	1,29,80,000	0	-	-	-	Purchased in financial year 2017-18
2	Controlled Rate FREEZER with supply tank of 180 litre + insulated hose and racks	18,75,000	0	-	-	-	Purchased in financial year 2017-18
3	Cryo shipper Holding time 125 days	1,40,000	0	-	-	-	Purchased in financial year 2017-18
4	Cryo shipper Holding time 100 days	1,60,000	0	-	-	-	Purchased in financial year 2017-18
5	Cryo shipper IATA Approved	1,60,000	0	-	-	-	Purchased in financial year 2017-18
6	Shipping Case	60,000	0	-	-	-	Purchased in financial year 2017-18
7	LN2 Bucket	61,000	0	-	-	-	In process
8	-80°C Freezers -10 with inventory system Boxes, racks	12,40,000	1,38,600	23.05.18	19.07.18	PO No. 70459	-25°C Deep freezer purchased Through tender process and price negotiation meeting
9	Lab Freezers	43,700	0	-	-	-	Purchased in financial year 2017-18
10	Sample Pass Boxes	3,34,002	0	-	-	-	Purchased in financial year 2017-18
11	Biosafety cabinet	9,60,000	0	-	-	-	Purchased in financial year 2017-18

Chandra Bihari

13/8/18



1st April 2018 - 30th June 2018

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12	Microcentrifuges including refrigerated centrifuges and rotors adaptors-I	2,80,000	0	-	-	-	Purchased in financial year 2017-18
13	Table top Centrifuges with adaptors	4,23,000	0	-	-	-	Purchased in financial year 2017-18
14	Micro ultracentrifuge	19,00,000	0	-	-	-	In process
15	Labelling machines & bar-code readers	1,30,000	0	-	-	-	Purchased in financial year 2017-18
16	Cryolables	2,60,000	0	-	-	-	Purchased in financial year 2017-18
17	Computerised support systems: hardware, advanced tissue bank software and web site maintenance and networking, Cryomonitor software	25,50,000	1,99,748.85	21.05.18	12.06.18	PO No. 70386, 70387	Hardware and Software requires integration with instruments so the hardware and software is kept on hold so that it can be integrated
18	CO2 Incubator	5,59,500	0	-	-	-	Purchased in financial year 2017-18
19	RT-PCR	20,00,000	0	-	-	-	In process
20	Grossing Station	6,40,000	2,41,500.00	21.04.18	21.06.18	PO No. 69433	As per institutional policy 3 quotations invited and Price Negotiation conducted & L1 purchased
21	Cryotome	11,68,000	0	-	-	-	Purchased in financial year 2017-18
22	Microtome	4,97,000	0	-	-	-	Purchased in financial year 2017-18
23	Tissue Processor	11,00,000	0	-	-	-	Purchased in financial year 2017-18
24	Embedding Station	9,00,000	0	-	-	-	Purchased in financial year 2017-18
25	Tissue Microarrayer	3,00,000	0	-	-	-	In process
26	Microscope	8,66,000	0	-	-	-	In process
27	Automated IHC, IF, ISF Stainer	28,33,000	0	07.06.18	In transit	PO No. 70940	Equipment purchased on reagent rental basis through tender process L1 considered and PNC conducted


G. S. Srinivasan

13/8/18

( 1<sup>st</sup> April, 2018 - 30<sup>th</sup> June, 18 ) 17/

28	Flow Cytometer with sorter	1,98,00,000	2,14,32,070.00	13.06.18	In transit	PO No. 71142	Through tender process and multiple price negotiation meetings and L1 considered
29	NGS	1,91,00,000	0	-	-	-	Purchased in financial year 2017-18
30	Mass spectrometric	4,96,00,000	4,80,00,000.00	07.04.18	In transit	PO No. 69028, 69029	Through tender process and multiple price negotiation meetings
31	Table Chairs, bench archiving cabins, racks, cabinet stationery, cupboards	5,00,000	7,01,485.36	07.05.18, 07.05.18, 07.05.18, 07.05.18, 02.06.18, 07.05.18, 09.05.18, 08.05.18	21.06.18, 21.06.18, 21.06.18, 25.05.18 In transit, In transit, In transit, In transit	PO No. 69842, 69841, 69839, 69838, 70809, 69836, 69923, 69889	Miscellaneous equipments necessary for functioning of biobank
Total		12,34,20,202	7,07,13,404				

  
(PROJECT INVESTIGATOR)  
SIGNATURE & STAMP  
**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
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13/8/18

**Dr. ANIL AGARWAL**  
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(FINANCE OFFICER)  
SIGNATURE & STAMP  
**Dy. Manager (Finance & Accounts)**  
**Institute of Liver and Biliary Sciences**  
(An Autonomous Institute Under the Govt. NCT, Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070



Manpower Details(Research Staff working in the DBD funded project)

1. Name of the Sanctioning Authority: Department of Biotechnology, Ministry of Science & Technology, Government of India
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2005 / 2016-2017 dated 10.08.2016 partially modified on 13.02.2017 (BT/PR7403/MED/29/657/2012) *dated 30.08.2016*
4. Amount of the sanctioned grant: Rs. 60,48,000/- (Rupees Sixty Lakhs Forty Eight Thousand Only)
5. Title of the Project: "Setting up the Tissue Bank Facility for Clinical & Research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Particulars of Manpower working in the project

Due and Drawn Statement

Sl. No.	Manpower JRF / SRF / RA-I / RA-II / RA-III / Any other	Educational Qualification of the Research staff (Enclose the bio data)	Date of Joining	Old Stipend + HRA	Revised + HRA	Difference	Remarks, if any
1	None	-	-	-	-	-	-
2							
3							
4							
5							
6							
7							

\*Please indicate if there was any deviation as against the DBT sanction, and reason thereof.

7. Any other Remarks:

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)  
SIGNATURE

Dr. CHHAGAN BIHARI  
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*D.R. Verma*  
(FINANCE OFFICER)  
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Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
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New Delhi-110070

Manpower Details(Research Staff working in the DBD funded project)

1. Name of the Sanctioning Authority: Department of Biotechnology, Ministry of Science & Technology, Government of India
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2005 / 2016-2017 dated 10.08.2016 partially modified on 13.02.2017 (BT/PR7403/MED/29/657/2012) dated 30.08.2016
4. Amount of the sanctioned grant: Rs. 60,48,000/- (Rupees Sixty Lakhs Forty Eight Thousand Only)
5. Title of the Project: "Setting up the Tissue Bank Facility for Clinical & Research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Particulars of Manpower working in the project

Due and Drawn Statement

Sl. No.	Manpower JRF / SRF / RA-I / RA-II / RA-III / Any other	Educational Qualification of the Research staff (Enclose the bio data)	Date of Joining	Old Stipend + HRA	Revised + HRA	Difference	Remarks, if any
1	Dr. Birendra Kr. Yadav (Biobank Manager)	PhD, MBA	09.10.2017	1,35,000/-	Not Applicable	None	
2	Mr. Koustav Mallick (Business Development officer)	MBA Marketing	20.11.2017	65,000/-	Not Applicable	None	
3	Mr. Satish kumar (Senior Technical Executive)	MSc (Microbiology)	16.10.2017	44,000/-	Not Applicable	None	
4	Mr. Amit Kumar Rathore (Junior Technical Executive)	MSc (Biotech)	09.10.2017	29,000/-	Not Applicable	None	
5	Ms. Manpreet Kaur (Junior Technical Executive)	BSc (MLT)	23.10.2017	29,000/-	Not Applicable	None	Left on 01.02.2018
	Ms. Pragya Mishra (Junior Technical)	B.Tech (Biotechnology)	08.02.2018	29,000/-		None	Joined as replacement

Ganesh Kumar

12/8/18

11/c

	Executive)						
6	Ms. Shivani Goel (Junior Technical Executive)	BSc (MLT) MBA	23.10.2017	29,000/-	Not Applicable	None	
7	Mr. Indrajeet Kumar (Office Executive)	BCA Graduate	01.10.2017	25,000/-	Not Applicable	None	
8	Mr. Aftab Accountant (part time)	B.com	12.01.2018	10,000/-	Not Applicable	None	
9	Mrs. Rumita Poddar Legal Expert	LLB		20,000/-	Not Applicable	None	

\*Please indicate if there was any deviation as against the DBT sanction, and reason thereof.

7. Any other Remarks:

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)  
SIGNATURE  
**Dr. CHHAGAN BIHARI**  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
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New Delhi-110 070

*31/8/18*  
(HEAD OF THE INSTITUTE)  
SIGNATURE & STAMP

*13/8/18*  
**Dr. ANIL AGARWAL**  
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D-1, Vasant Kunj, New Delhi-110070

*13/8/18*  
(FINANCE OFFICER)  
SIGNATURE & STAMP  
**D.R. VERMA**  
Dy. Manager (Finance & Accounts)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute Under the Govt. NCT, Delhi)  
Sector D-1, Vasant Kunj,  
New Delhi-110070



(1<sup>st</sup> April, 18- 30<sup>th</sup> June, 18)

Annexure- G

Manpower Details

(Research Staff working in the DBD funded project)

1. Name of the Sanctioning Authority: Department of Biotechnology, Ministry of Science & Technology, Government of India
2. Name of the Grantee Institution: Institute of Liver & Biliary Sciences (ILBS)
3. No. & Date of Sanction order: 102 / IFD / SAN / 2005 / 2016-2017 dated 10.08.2016 partially modified on 13.02.2017 (BT/PR7403/MED/29/657/2012) dated 30.08.2016
4. Amount of the sanctioned grant: Rs. 60,48,000/- (Rupees Sixty Lakhs Forty Eight Thousand Only)
5. Title of the Project: "Setting up the Tissue Bank Facility for Clinical & Research in HCV at ILBS renamed as "National Liver Disease Biobank"
6. Particulars of Manpower working in the project

Due and Drawn Statement

Sl. No.	Manpower JRF / SRF / RA-I / RA-II / RA-III / Any other	Educational Qualification of the Research staff (Enclose the bio data)	Date of Joining	Old Stipend + HRA	Revised + HRA	Difference	Remarks, if any
1	Dr. Birendra Kr. Yadav (Biobank Manager)	PhD, MBA	09.10.2017	1,35,000/-	Not Applicable	None	
2	Mr. Sushil Kumar Gupta (IT-Manager)	MCA, BSc (Computer Science)	21.05.2018	1,18,000/-	Not Applicable	Explained in remarks	DBT sanctioned for IT Manager at 1,18,000/- p.m. selection committee recommended IT Team Lead to be recruited at 77,500/- with annual increment of 10% p.a.
3	Mr. Koustav Mallick (Business Development officer)	MBA Marketing	20.11.2017	65,000/-	Not Applicable	None	
4	Mr. Satish kumar (Senior Technical Executive)	MSc (Microbiology)	16.10.2017	44,000/-	Not Applicable	None	

Sanctioned by

18/7/18

5	Mr. Amit Kumar Rathore (Junior Technical Executive)	MSc (Biotech)	09.10.2017	29,000/-	Not Applicable	None	
6	Ms. Pragya Mishra (Junior Technical Executive)	B.Tech (Biotechnology)	08.02.2018	29,000/-	Not Applicable	None	
7	Ms. Shivani Goel (Junior Technical Executive)	BSc (MLT) MBA	23.10.2017	29,000/-	Not Applicable	None	
8	Mr. Indrajeet Kumar (Office Executive)	BCA Graduate	01.10.2017	25,000/-	Not Applicable	None	
9	Mr. Aftab Accountant (part time)	B.com	12.01.2018	10,000/-	Not Applicable	None	
10	Mrs. Rumita Poddar Legal Expert	LLB		20,000/-	Not Applicable	None	

\*Please indicate if there was any deviation as against the DBT sanction, and reason thereof.

7. Any other Remarks:

*Chhagan Bihari*  
(PROJECT INVESTIGATOR)  
SIGNATURE  
  
Dr. CHHAGAN BIHARI  
Associate Professor, Pathology  
Institute of Liver and Biliary Sciences  
Sector D-1, Vasant Kunj  
New Delhi-110 070

*31/8/18*  
(HEAD OF THE INSTITUTE)  
SIGNATURE & STAMP  
*13/0/10'*

Dr. ANIL AGARWAL  
Dy. Head (Admin)  
Institute of Liver and Biliary Sciences  
(An Autonomous Institute under GNCTD)  
D-1, Vasant Kunj, New Delhi-110070

*Dr. Verma*  
*13.8.18*  
(FINANCE OFFICER)  
SIGNATURE & STAMP  
DR. VERMA  
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