

# NATIONAL INSTITUTE OF BIOLOGICALS

# NEWS LETTER



Volume No. 8: Issue 2: July-December 2020





## **Director's Message**

As the world adapts to the realities of the novel Corona virus pandemic, that causes COVID-19, NIB remains in solidarity in our nation's battle against COVID-19 and is constantly devoted for the cause of public health safety of its compatriots. While many people around the world are first time witnessing the adversity and disruption that an infectious disease can cause, for those of us involved in Quality Control testing of Biologicals and are dedicated to protecting and promoting public health, this is in many ways' familiar territory.

NIB hosted a Laboratory visit of 31 International delegates from 20 countries, along with 02 National Institute of Training for Standardization(NITS) official representatives on 25<sup>th</sup> February, 2020. The said delegates were participants of 11<sup>th</sup> International Training Programme on "Competence and Management systems of Laboratories" for developing Countries being conducted at NITS, Noida, India under Indian Technical and Economic Cooperation (ITEC) Programme of Ministry of External Affairs, Government of India.

It is our great honour to facilitate the visit of Dr. Dharmendra Singh Gangwar (IAS) (Additional Secretary & Financial Advisor- Ministry of Health & Family Welfare, Govt. of India) to NIB on 24<sup>th</sup> January 2020, for interaction with the Scientists and other officials

Shri Ajay Kumar Ade, Junior Scientist, Vaccine Laboratory visited Drug Regulatory Authority, Bhutan as a technical expert for workshop on "Capacity Building in Regulations of Vaccines" held from 10<sup>th</sup>-14<sup>th</sup> February 2020.

Continuing with the tradition of training the trainers of the blood banks, NIB has trained 89 blood bank officials and technicians from 03 different states of India in collaboration with Blood Cell, NHM, Ministry of Health & Family Welfare, Government of India.

Realizing the importance of technical experience in the industry, NIB in line with Pradhan Mantri Kaushal Vikas Yojana under "National Skill Development and Hands-on Training", imparted two weeks residential training to 74 M. Sc. Biotechnology Students from various universities / institutes of the country on Quality Control of Biologicals.

NIB continues to work together to promote and protect public health and ensure services in this time of global health crisis.

#### Dr. Reba Chhabra

Director i/c, NIB

This newsletter aims to disseminate the information on the scientific activities undertaken by the institute to provide safe, efficacious and potent biological and biotherapeutic drugs for promoting and protecting public health.

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We look forward to hear from you!!!

## **COVID- 19 TESTING AT NIB**

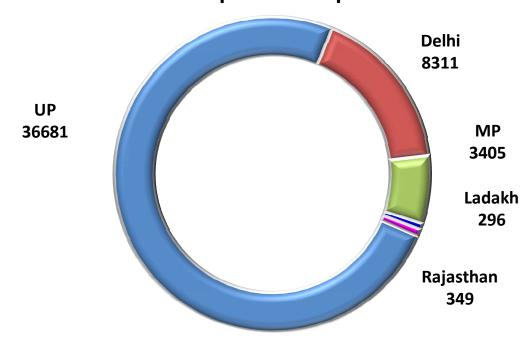
On directions received from Ministry of Health & Family Welfare, Government of India to take-up COVID-19 testing by NIB on cobas® 6800 installed in December 2019. Engineering work was initiated and continued round the clock for creation of COVID-19 testing lab with the available resources, as nation went into complete lockdown from 25<sup>th</sup> March 2020. A Biosafety level-2 (BSL-2) laboratory under negative pressure was established as per the requirements mentioned in Standard Operating Procedure (SOP) of M/s Roche.

National Institute of Biologicals (NIB), NOIDA is the first high throughput Laboratory in India, to initiate testing for COVID-19 suspected samples from  $4^{th}$  April 2020, on M/s Roche cobas 6800 which is a high throughput diagnostic instrument with a quick turnaround rate. The instrument has the capacity to undertake about 1000 tests per day.

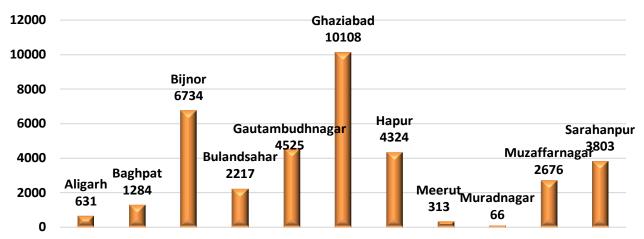
NIB team is working 24x7 in five shifts to perform COVID-19 testing and thereby testing to full capacity of cobas 6800 machine, i.e., 940 samples per day so that samples can be reported timely. Accordingly, the results are being reported by ICMR Scientist deputed in NIB. For onward reporting to ICMR, the results of these tested samples by NIB are submitted to Dr. Anup Anvikar, Scientist- F, National Institute of Malaria Research (NIMR), ICMR.

NIB is continuously testing COVID-19 suspected patient samples received from various hospitals, and quarantine centres of Uttar Pradesh (Aligarh, Baghpat, Bijnor, Bulandshahr, Gautambudh Nagar, Ghaziabad, Hapur, Meerut, Muradnagar, Muzaffarnagar & Saharanpur), Madhya Pradesh (Bhopal & Indore), Rajasthan (Jodhpur), Ladakh and Delhi NCR. More than 49000 samples have been tested from April to June 2020 received from five states of the country. About 37000 samples from 11 Districts have been received and tested from UP state.

## 49042 COVID- 19 Suspected samples received and tested

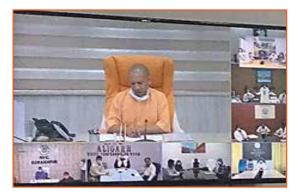






Dr. Reba Chhabra, Director I/c, NIB, and Scientist from ICMR, also attended the review meeting on the testing status taken up by ICMR from time to time and the Principal Secretary (Medical Education) U.P via Video Conferencing on every Friday. Dr. Rajneesh Dube, Addl. Chief Secretary to Govt of U.P. Medical Education Department Lucknow, and Shri Suresh Kumar Khanna, the Cabinet Minister for Finance, and Medical Education Departments, appreciated NIB- ICMR for the 100% testing, testing beyond the given target and reporting respectively within 24 to 48 hours.

Other testing laboratories connected in Video Conferencing were from various districts of UP viz. Aligarh, Etawah, Ambedkar Nagar, Hapur, Bareilly, Gorakhpur, Agra, Lucknow, Varanasi, Prayagraj, Meerut, Kanpur, and Gautambudh Nagar, Jhansi, Saharanpur etc.







A Video was prepared by NIB on "NIB facility for COVID-19 testing", on the various activities performed during COVID-19 testing at NIB, in order to apprise Ministry of Health & Family Welfare, Government of India

and DG- ICMR. The video was sent to both by NIB which received appreciation and is uploaded on ICMR's website. (https://www.icmr.gov.in/media.html) Video URL: https://youtu.be/tWOPUDOPI2k

## **VISIT OF INTERNATIONAL DELEGATES TO NIB**

NIB hosted visit of 31 International Delegates from 20 countries, along with 02 NITS (National Institute of Training for Standardization) representative officials, on 25<sup>th</sup> February, 2020.



The delegates were participants of 11<sup>th</sup> International Training Programme on "Competence and Management systems of Laboratories" for developing Countries being conducted at NITS, NOIDA, India under Indian Technical and Economic Cooperation (ITEC) Programme of Ministry of External Affairs, Government of India.



The delegates were given a presentation on the basic overview of NIB and visited various Laboratories and interacted with Scientists. Objective of visit was to make them understand and enhance their knowledge on Quality Control testing of Biologicals in an accredited laboratory.





## **EMINENT DIGNITARIES TO NIB**

#### Visit of Dr. Dharmendra Singh Gangwar (IAS) (Additional Secretary & Financial Advisor

Dr. Dharmendra Singh Gangwar (IAS) (Additional Secretary & Financial Advisor- Ministry of Health & Family Welfare, Govt. of India), visited NIB Laboratories on 24<sup>th</sup> January 2020, and interacted with the Scientists, and other officials.





#### Visit of Dr. Shalini Singh (Director ICMR-NCPR)

Dr. Shalini Singh, Director ICMR-National Institute of Cancer Prevention and Research NCPR, Govt. of India, visited NIB on 23<sup>rd</sup> June 2020, to perceive the COVID-19 Testing Facility and reporting by ICMR at NIB for establishing the same at their institute and thereafter, she appreciated the efforts of Director-I/c and other NIB officials in this regard.





Visit of Dr. Rajni Kant (Director, ICMR-RMRC);

During his visit to NIB on 26<sup>th</sup> June 2020, Dr. Rajni Kant (Director ICMR- Regional Medical Research Centre RMRC, Govt. of India) also visited NIB COVID-19 Testing Facility and thereafter, prized the efforts of Director-I/c and other NIB officials in this regard.





## **VISITORS TO NIB**

#### Visit of pharmacy students from Kerala on 3rd February 2020

NIB hosted One-day Laboratory visit of 42 B. Pharm students along with 02 Faculty members from College of Pharmaceutical Sciences, (Govt. Medical College, Kottayam, Kerala) on 3<sup>rd</sup> February 2020. The students were given the basic overview of NIB and toured to various Laboratories. The students interacted with NIB Scientists and upgraded their knowledge on Quality Control of various Biologicals.





#### Visit of trainees of National Institute of Animal Welfare (NIAW)

NIB organised the visit of 16 trainees of National Institute of Animal Welfare (NIAW) comprising of Faculty, PhD students and Post docs of Lala Lajpat Rai University of Veterinary and Animal Sciences, (LUVAS), Hisar, Haryana to NIB, Animal facility to see the working and scientific management of animal house on 20<sup>th</sup> March 2020. This was part of the training organized by National Institute of Animal Welfare (NIAW), Ministry of Fisheries, Animal Husbandry & Dairying, Government of India, on "Management & Welfare of Lab animals for research purposes", from 18<sup>th</sup>-22<sup>nd</sup> March 2020 at Ballabgarh, Faridabad.

## FOREIGN VISIT OF NIB SCIENTIST

Mr. Ajay Kumar Ade, Junior Scientist, Vaccine Laboratory visited Drug Regulatory Authority, Bhutan as a technical expert for workshop on "Capacity Building in Regulations of Vaccines" held from 10<sup>th</sup>-14<sup>th</sup> February 2020.





## PARTICIPATION IN WORKSHOPS/CONFERENCES/ MEETINGS/TRAININGS:

 Dr. Reba Chhabra, Director i/c, NIB, participated in the Official Language Inspection conducted by the Third Sub-Committee of the Parliamentary Committee on Official Language on 22.01.2020. The committee observed and supervised the Hindi work being done in the office.



- Dr. Rajesh Kumar Sharma, Scientist Grade III of Immunodiagnostic Kits & Molecular Diagnostic Laboratory (IDK & MDL) attended training programme for Technical Committee Members at National Institute of Training for Standardization (NIST), NOIDA on 23<sup>rd</sup> & 24<sup>th</sup> January, 2020.
- Dr Shikha Yadav, Scientist Grade II & Head, Animal Facility was nominated by CPCSEA, Animal Welfare Division, Ministry of Fisheries, Animal Husbandry and Dairying as main nominee in the Institutional Animal Ethics Committee (IAEC) meetings held as under:
  - a) IIMT college of Pharmacy, Greater Noida, UP on 2<sup>nd</sup> January 2020.
  - b) Galgotias University, Greater Noida, UP on 24th January 2020.
- Dr. Gauri Misra, Scientist Grade-II & Head Enzyme and Hormone Laboratory and Dr. Paras Jain, Junior Scientist participated in "Meeting of stakeholders for rFSH injection monographs IP 2018 w.r.t. Test for Oligomers on 5<sup>th</sup> February 2020" at Indian Pharmacopoeia Commission, Ghaziabad.
- Dr. Gauri Misra, Scientist Grade-II & Head Enzyme and Hormone Laboratory delivered an invited talk on "AGC kinases as drug targets in cancer" at 8<sup>th</sup> International Translational Cancer Research Conference: Role of Inflammation and Immune System for Cancer Prevention and Treatment organized by Department of Biochemistry, Banaras Hindu University, Varanasi & Society for Translational Cancer Research (STCR) during 13<sup>th</sup>-16<sup>th</sup> February 2020.

- Dr. Suresh Kumar, Scientist Grade III, Animal Facility contributed as a Resource person on 20<sup>th</sup> February 2020 for conducting a hands-on training on "Euthanasia Method & Necropsy Procedure & Handling animal tissues for Histopathological examination" in the workshop on "Basic training in animal handling & experimentation" held from 17<sup>th</sup> -20<sup>th</sup> February, 2020 at the Institute of Liver and Biliary Sciences, New Delhi.
- Dr. Shikha Yadav, Scientist Grade-II, delivered a talk on "Preoperative care, anaesthesia, surgical technique and analgesia" on 20.3.2020 at NIB, Noida for 16 participants comprising of Faculty, PhD students and Post docs of Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, Haryana as part of their training at National Institute of Animal Welfare, Ministry of Fisheries, Animal Husbandry & Dairying, Government of India.
- Dr. Shikha Yadav, Scientist Grade-II, invited was speak on "General occupational health hazards, personal hygiene transmission across species boundaries" and "Principles of 3 R's in Ethical Animal Based Research" at NIAW, Ballabgarh, Faridabad on 21st March 2020.



• Shri P.S. Chandranand, Junior Scientist delivered a talk on "Increased adoption of emerging technologies like Artificial Intelligence & Robotics in, In-Vitro Diagnostics, in 5<sup>th</sup> international exhibition & conference on pharmaceutical and medical device industry, at Mahatma Mandir, Gandhinagar, Gujarat on 6<sup>th</sup> March 2020.





- Shri P.S. Chandranand, Junior Scientist, participated and provided technical inputs during the "EXPERT DIALOG: Indigenous Manufacturing of Biomedical Devices enabled by Research and Ecosystem support" on 10<sup>th</sup> February, 2020 in Department of Biotechnology, New Delhi.
- Shri P.S. Chandranand, Expert member attended the meetings convened by DBT-Biotechnology Industry Research Assistance Council (DBT-BIRAC- FIRST-HUB) committee, a Facilitation Cell for the Start-ups/ innovators and for those who want to take up R&D in pharma and medical deviceson



every Friday and provided technical guidance and inputs for start-ups engaged in COVID-19 related diagnostic & therapeutic products testing.

## **TRAININGS**

#### National Skill Development and Hands on Training in Quality Control of Biologicals:

NIB in line with Pradhan Mantri Kaushal Vikas Yojana under "National Skill Development and Hands-on Training", imparted two weeks residential training to:

a) 30 M.Sc. Biotechnology Students (15 students each from Jammu University Jammu, J & K, and Tezpur University, Napaam, Assam) on Quality Control of Biologicals from 06<sup>th</sup> - 17<sup>th</sup> January 2020.





b) 15 M.Sc. Biotechnology Students with 01 Technical Official of Mizoram University, (Mizoram) and 15 M.Sc. Students with 01 Faculty (Biotechnology and Microbiology) of Himachal Pradesh University (HP) from 27<sup>th</sup> Jan-7<sup>th</sup> Feb, 2020.





c) 14 M.Sc. Biotechnology Students of Gauhati University (Assam) and 15 M.Sc. Microbiology Students of Central Research Institute, Kasauli (HP) from 17<sup>th</sup>-28<sup>th</sup> February, 2020





### **Training of Trainers for Strengthening of Blood Services:**

NIB in collaboration with Blood Cell NHM, Government of India, conducted 03 six-days residential training programme on "Training of Trainers for Strengthening of Blood Services" for the states of Maharashtra, Chhattisgarh and Uttar Pradesh. The program aimed at strengthening blood services in the states in the areas of e-RaktKosh software for transparent & streamlined work flow of the blood services, testing for detection of transfusion transmitted infections (TTI), Blood Group Serology, Equipment Maintenance & their Quality Assurance, Haemovigilance training, Analysis of gaps in Blood Bank Management and Total Quality Management System. The basic objective of this training was to improve the standards of Blood services in our country.

a) 32 Blood Bank Officials from Maharashtra (20th-25th January, 2020).





#### b) 35 Blood Bank Officials from Chhattisgarh (3<sup>rd</sup> - 8<sup>th</sup> February, 2020)





c) 22 Blood Bank Officials from Uttar Pradesh (2<sup>nd</sup>-7<sup>th</sup> March, 2020)





Animal Experimentation Training for Students & Staff Members of Delhi University at NIB:

One-week training was imparted on Animal Experimentation to 16 students and 03 staff member of Biochemistry Department from University of Delhi South-Campus, at NIB, from 09<sup>th</sup>-13<sup>th</sup> March, 2020. The Animal Facility Division of NIB educated the participants about various important aspects involved in the animal experimentation like care, handling, management procedures etc.



Blood Reagent Laboratory trained Quality Control Officer from M/s Avecon Healthcare Pvt. Ltd., in on 16<sup>th</sup> March 2019 on Quality Control of Blood Grouping Reagents at NIB.

#### Participation of NIB Laboratories in WHO-NIBSC collaborative study:

- Therapeutic antibodies Laboratory has participated in WHO-NIBSC Collaborative Study for preparation of WHO 1st International Standard (IS) for Trastuzumab biological activity. The results of the bioassay performances for estimation of biological activity have been communicated to NIBSC for further analysis and compilation for assigning the potency value.
- 2) Blood Products Laboratory has successfully participated in WHO-NIBSC Collaborative Study to calibrate the "WHO 3rd International Standard for Thrombin" organized by NIBSC, UK. The results of the assay for estimation of Thrombin in Fibrin Sealant Kit have been communicated to NIBSC for analysis and assigning the value.

#### Participation of NIB Scientists as Auditor

Shri Subhash Chand, Scientist Grade-III & Shri P.S. Chandranand, Junior Scientist, were invited as Auditors to conduct Internal audit as per the requirements of ISO 17025:2017 standard for auditing of Bioassay

Laboratory of Translational Health Science and Technology Institute (THSTI), Faridabad held on 13<sup>th</sup> February, 2020



# UPGRADATION OF CENTRALIZED FACILITY FOR BIOASSAYS (CFB):

The new Centralized Facility for Bioassay has been inaugurated on 08<sup>th</sup> June, 2020 and is fully functional in all aspects. The Centralized Facility for Bioassays (CFB) was set up in the Laboratory Block with 4 biosafety modules to cater the cell-based bioassays as a part of Quality Control evaluation for various recombinant products like Erythropoietin, Filgratism, Interferon, Therapeutic Antibodies, Immunoglobulin etc.





## WOMEN'S DAY CELEBRATION

NIB celebrated International Women's Day on 8<sup>th</sup> March 2020. Dr. Tripti Khanna, Scientist-G, ICMR was invited as guest of honourand welcomed by Dr. Reba Chhabra, Director i/c. Dr. Tripti Khanna addressed the gathering by emphasizing the role of women and celebrating the achievements of women and/or calling for gender parity. She encouraged everyone to strive to ensure that all women can, and do, achieve their ambitions, with equality in return.











## **SUPERANNUATION**

Dr. Achla Prasad, Deputy Director- Quality Control, superannuated from NIB on 28<sup>th</sup> February, 2020 after rendering 25 years of service since 1995.

NIB wishes her a happy and healthy life.

Director-NIMR



#### **ACKNOWLEDGEMENT:**

Newsletter Editorial Team acknowledges the contribution of all the staff members of NIB.



#### **NATIONAL INSTITUTE OF BIOLOGICALS**

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