

# CENTRE FOR INNOVATION IN INFECTIOUS DISEASE RESEARCH, EDUCATION, AND TRAINING (CIIDRET)

## Annual Report 2020-21

### Major Activities and Achievements

Centre for Innovation in Infectious Disease Research, Education, and Training (CIIDRET) was established under the ordinance XV-A of the University of Delhi in October 2015. As per its mandate, besides carrying out path-breaking Innovation-driven research, CIIDRET has been carrying out several outreach activities, which include interaction with college students of science stream to inspire them to take up research and Innovation as their career. CIIDRET has organized Public Lectures by international and national scientists who are leaders in their field in different areas of scientific research. CIIDRET has organized Industry-Academia Interaction through ‘Entrepreneurship Guest Public Lecture Series’, which includes lectures by Entrepreneurs and the facilitators of Innovation. CIIDRET has been providing state-of-the-art Proteomic and Genomic analytical facilities along with expert advice to scientists from both academia and Industry, and offers consultancy to the Biotech Industry. CIIDRET organizes Hands-on training courses covering different aspects of Genomics and Proteomics in collaboration with Industry Experts under the scheme ‘Continuing Education and Skill Enhancement for Innovation in Biotechnology (CIIDRET-CESEIB)’. These courses are attended by college students, graduate students, research scholars, scientists and teachers from colleges and universities. In 2020, CIIDRET has initiated work on developing novel diagnostics and therapeutics for COVID-19.

### Honors/Distinctions

- Dr. Vijay Chaudhary joined as NASI Platinum Jubilee Senior Scientist from 1 January 2021 for a period of 3 years.
- Dr. Vijay Chaudhary served as NASI Honorary Scientist from 1 September 2020 - 31 December 2020.
- Dr. Vijay Chaudhary appointed as Adjunct Professor at Regional Centre for Biotechnology (RCB), Faridabad from December 2020 for two years.

Dr. Vijay K. Chaudhary:

- Is Co-Chairman of the DBT Task Force on “Infectious Disease Biology.”
- Is Co-Chairman of the DBT NER Technical Expert Committee (TEC) Medical Biotechnology-II.
- Is Member of Scientific & Technical Appraisal & Advisory Group (STAG), Medical Biotechnology, DBT.
- Is Member of Scientific & Technical Appraisal & Advisory Group (STAG), Medical Biotechnology, DBT NER.
- Is Member, DBT Expert Group on Technology Transfer Organization (TTO).
- Is Member of IP & Tech. Management Advisory Committee-BIRAC
- Is a Mentor, Nexus @ American Center, New Delhi. (<https://startupnexus.net/mentors>).

Dr. Amita Gupta is Joint-Secretary of the Society for Bacteriophage Research and Therapy (SBRT).

## **Awards**

Dr. Vijay Chaudhary awarded NASI Platinum Jubilee Senior Scientist Fellowship from 1 January 2021 for a period of 3 years.

## **Research Projects**

Department of Biotechnology- Biotechnology Industry Research Assistance Council (DBT-BIRAC) has funded project on 25 November 2020 on **“Therapeutic Antibodies for COVID-19” under strategic funding for Covid-19 Consortium under National Biopharma Mission for a total cost of Rs. 16.5664 crores**, with support of Rs. 10.705 crores to the CIIDRET, UDSC and Rs. 5.8614 crores to M/s. Genova Biopharmaceuticals Limited for 15 months.

## **Publications/ Patents / provisional patents / technology transfers**

### **Publications:**

- An efficient ORF selection system for DNA fragment libraries based on split beta-lactamase complementation, V. Verma, G. Joshi, A. Gupta and V. K. Chaudhary. (2020) PLoS One, 15, e0235853.
- Emulsion PCR made easy. Verma, V., Gupta, A., Chaudhary, V.K. (2020) Biotechniques: 69, 421.

### **Patents granted/ published:**

- An antibody fragment library, and uses thereof; EP application number - 18882787.7, Filed on 29/06/20
- An antibody fragment library, and uses thereof; US patent application number -16/768,116, Filed on - 29/05/2020

### **Presentation in Conferences**

- Prof. Vijay K. Chaudhary participated and presented in the DBT Welcome Trust IAVI partnered Global Webinar on COVID Therapeutics held on 24<sup>th</sup> February 2021.

### **National/International MoUs Signed**

- MoU signed between University of Delhi South Campus (UDSC) and Genova Biopharmaceuticals Limited, Pune for development of Therapeutic antibodies to COVID-19.

### **Extension and Outreach Activities**

- One M.Sc student of Jamia Millia Islamia carried out dissertation research work at CIIDRET, UDSC. She was trained in cloning, expression and purification of SARS-CoV2 proteins.

### **Any additional Information**

Professor Yogendra Singh, Department of Zoology, Delhi University who has been a member of CIIDRET since its inception, took over in September 2020 as Director, CIIDRET from Professor Vijay Chaudhary following his superannuation.