



## **ICAR – National Agricultural Higher Education Project (NAHEP)**

**Centre for Advanced Agricultural Science and Technology (CAAST)**

**Centre of Excellence for Advanced Research on Animal Food Safety**



**Mumbai Veterinary College, Parel, Mumbai – 400 012**  
**Maharashtra Animal & Fishery Sciences University, Nagpur – 440 001**  
**Maharashtra, India**

### From The Desk of Vice-Chancellor

It is of great satisfaction to me that NAHEP-CAAST-MAFSU team has organized various webinars, international trainings as well as three quiz contests during the period when the country was battling with the second wave of Covid-19 pandemic. The successful organization of one-week international training program was a commendable task and I appreciate the efforts of the project team. Organization of various programs to celebrate several events inculcates a special enthusiasm in the students. Organization of quiz and training programs on World Milk Day, World Zoonosis Day and World Food Safety Day is a praiseworthy task performed by the team. It gives me immense pleasure to announce that most of the equipment's sanctioned under the project have been purchased by the constant effort of the project team. The project is on the right trail and is my firm belief that we will set up a milestone in every horizon of animal origin foods as per the mandate of the project.



**Col. (Dr.) Prof. A. M. Paturkar**  
**Vice-Chancellor**  
**MAFSU, Nagpur**

### International Training on “Gene Cloning: Advances and Applications in Veterinary Sciences” 31<sup>st</sup> May to 4<sup>th</sup> June 2021

One Week International Online Training Program on “Gene Cloning: Advances and Applications in Veterinary Sciences” was organized from 31<sup>st</sup> May to 4<sup>th</sup> June 2021.

The inaugural programme was graced by Col. (Dr.) Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, MAFSU, Nagpur; Dr. B. P. Mishra Director, ICAR-NBAGR, Karnal, Haryana; Dr. R. C.

Agrawal, DDG (Education) & National Director NAHEP, ICAR, New Delhi; Dr. Prabhat Kumar, National Co-Ordinator, NAHEP-CAAST, ICAR, New Delhi; Dr. A. P. Somkuwar, DI & Dean Faculty of Veterinary Science, MAFSU, Nagpur; Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur; Dr. V. D. Aher, Director of Extension Education, MAFSU, Nagpur and Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur. Dr.

A. S. Rande, Associate Dean and Dr. R. J. Zende, Principal Investigator, NAHEP-CAAST were Course Directors of the program.

The whole training was segregated in five technical sessions, technical session I (31/05/2021), II (01/06/2021), III (02/06/2021), IV (03/06/2021) and V (04/06/2021). Dr. S. W. Bonde, Associate Dean, College of Fisheries, Nagpur; Dr. A. P. Somkuwar, DI and Dean, MAFSU, Nagpur; Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur; Dr. A. Samad, Ex. DI and Dean, MAFSU, Nagpur; Dr. (Mrs.) S. B. Majee, Professor, Department of Veterinary Microbiology, Mumbai Veterinary College, Mumbai acted as the Chairman for respective technical sessions.

Dr. Ravikant Agrawal, Senior Scientist, Division of Livestock Products Technology, ICAR-IVRI, Izatnagar, Bareilly, UP talked on “Introduction to Gene Cloning” where he briefed about the fundamentals of gene cloning. The topic on “Gene Editing and Applications in Farm Animals” was presented by Dr. Naresh Selokar, Scientist, Division of Animal Biotechnology, ICAR-NDRI, Karnal. Dr. Naresh Selokar, discussed the applications of gene cloning in farm animals for upgrading various quality attributes.

Dr. J. K. Kaushik, eminent scientist from Animal Biotechnology Centre, ICAR-

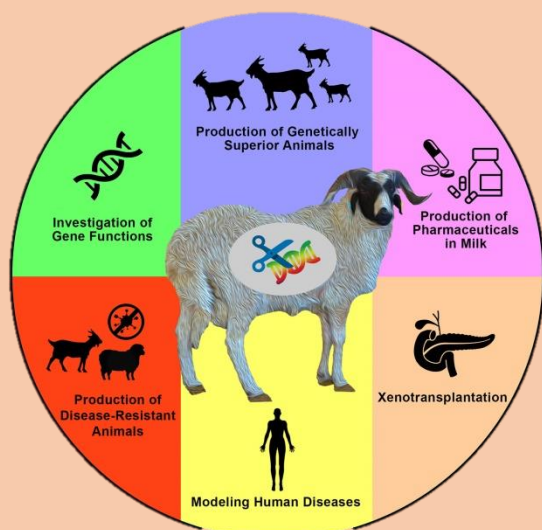
## International training on “Gene Cloning: Advances and Applications in Veterinary Sciences



NDRI, Karnal, shared his views on “Advances in Gene Cloning and Recombinant DNA technology” He discussed the engineering of recombinant molecules and use of restriction



endonucleases for making desirable changes in the gene.



Dr.

Nirmalya Ganguli, Scientist-C, National Institute of Animal Biotechnology (NIAB), Hyderabad, Telangana, spoke on “Advancement and Future Prospects of rDNA and Gene Cloning in Animal Health Management and Disease Resistance”. Dr. Nirmalya Ganguli provided a detailed information about the use of rDNA and gene cloning in improving the animal health incorporation of disease resistance in farm animals. A very important and interesting topic on “Development of Cell Lines by Genetic Engineering”, was covered by Dr. Dipak Deka, Associate Professor, Department of Animal Biotechnology, College of Veterinary Sciences, Khanapara, Guwahati, where he discussed about the management of different cell lines and their use.

The renowned researcher, Dr. Bhushan Jayrao, Director, Animal

Diagnostic Laboratory, Professor, Veterinary and Biomedical sciences, One Health Minor-Animal Diagnostic Lab, Wiley Lane University, delivered his lecture on “Detection of Food Pathogens and Animal Disease Diagnosis Employing rDNA Technology”. Dr. Bhushan Jayrao, through his extensive knowledge and personal experience gave a valuable insight on application of rDNA technology for detection of food borne pathogens and diagnosis of animal diseases.

Dr. Suresh Kuchipudi, Clinical Professor and Head of Microbiology Section and Associate Director, Animal Diagnostics-Lab 224, Huck Life Sciences, University Park spoke about “DNA and rDNA Vaccines: An emerging technology in Veterinary Medicine”. He discussed the utilization of various types of vaccines in controlling the diseases of animals.

Dr. Nagendra Hegde, Scientist-H, National Institute of Animal Biotechnology, Hyderabad covered the topic on “Antibody Therapy; Past, Present and Future”. He discussed the novel concept of antibody therapy and its future prospects in tackling various diseases of humans and animals.

Dr. V. D. Dighe, Scientist-E and Head, National Centre for Preclinical Reproductive and Genetic Toxicology, ICMR-NIRRH, Parel, Mumbai, expressed his views on “Targeted Delivery of

Recombinant Proteins”. Dr. Naresh Selokar, Scientist, Division of Animal Biotechnology, ICAR-NDRI, Karnal delivered his lecture on “Gene Cloning: Ethics, Pros and Cons”. He discussed about the various regulations related to gene cloning along with its advantages and disadvantages.

A total of 485 participants including faculties, scientists, PG and Ph.D. scholar, etc from every corner of India participated in training. To celebrate the various national and international events while disseminating the basic knowledge and inspire the students to learn, three quiz competitions were organized.

## *Time to find Quiz masters*

To celebrate the various national and international events while disseminating the basic knowledge and inspire the students to learn, three quiz competitions were organised



## *National online quiz on the occasion of “World Milk Day*

The national online quiz on the occasion of “World Milk Day” was organized on 1<sup>st</sup> June 2021 with the aim of expanding the knowledge and creating awareness among students. Total 393 participants attended the quiz competition out of which 140 participants scored more than 65 percent marks and were provided the certificate.

## *Technical Review Meeting*

Dr. R. J. Zende, Principal Investigator, NAHEP-CAAST-MAFSU presented progress of project for the financial year 2020-21 before the NAHEP technical review committee held on 3<sup>rd</sup> June 2021. He explained that analytical instruments such as LCMS/MS and ICPMS have been installed and operational qualification have been completed successfully. All the Co-PIs and Nodal Officers NAHEP-CAAST-MAFSU were also present for the meeting. Dr. R. C. Agrawal, National Director, NAHEP and DDG (Education), ICAR, New Delhi; Dr. Prabhat Kumar, National Co-ordinator, NAHEP-CAAST, ICAR, New Delhi; Shri. Dilip Roy, Deputy Secretary, ICAR-NAHEP-CAAST appreciated the work conducted so far by the NAHEP-CAAST team.



## National online quiz on the occasion of “World Food Safety Day”

“We are what we eat” a motto one must assimilate to understand the importance of healthy food. To explore the knowledge about the safe food, “Centre of Excellence for Advanced Research on Animal Food Safety” Mumbai Veterinary College, Mumbai organized online quiz on the occasion of “World Food Safety Day” on 7<sup>th</sup> June 2021 for post graduate students, faculties of veterinary universities etc. Total 138 participants attended the quiz and 81 participants who scored above 65 percent marks were provided the certificates.

## World Food Safety Day National Webinar on “Safe Food Now for a Healthy Tomorrow” 7<sup>th</sup> June, 2021

World Food Safety Day, a global awareness program was celebrated to create awareness about food safety and related aspects. Unsafe food is the cause of about 600 million foodborne disease cases reported every year. With the aim to draw attention and inspire action to help, prevent, detect and manage food borne risks, contributing to food security, human health, economic prosperity; One Day National webinar on “Safe Food Now for a Healthy Tomorrow” was organized on 7<sup>th</sup> June 2021.



The inaugural program was graced by Col. (Dr.) Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, MAFSU, Nagpur; Dr. R. C. Agrawal, DDG (Education) & National Director NAHEP, ICAR, New Delhi; Dr. Ashok Kumar,



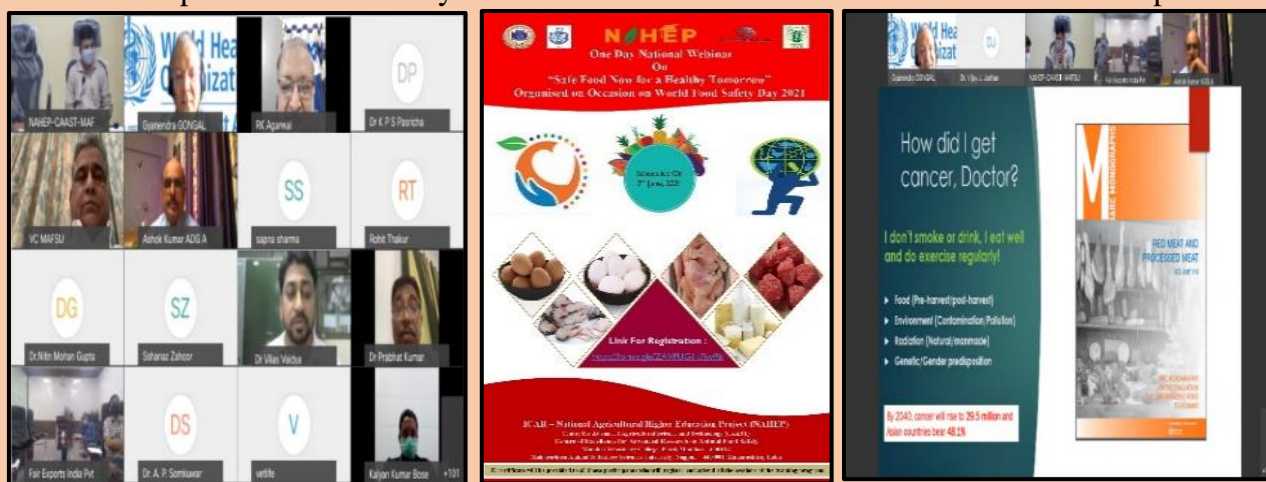
ADG (Animal Health), ICAR, New Delhi; Dr. Prabhat Kumar, National Co-Ordinator, NAHEP- CAAST, ICAR, New Delhi; Dr. A. P. Somkuwar, DI & Dean, Faculty of Veterinary Sciences, MAFSU, Nagpur; Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur; Dr. V. D. Aher, Director of Extension Education, MAFSU, Nagpur and Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur. Dr. A. S. Rande, Associate Dean and Dr. R. J. Zende, Principal Investigator, NAHEP-CAAST were Course Directors of the program.

During technical sessions, Dr. R. K. Agrawal, Principal Scientist (Retd), IVRI, Izatnagar acted as a Chairman; Dr. Vijay Jadhav, Associate Professor, College of Veterinary Science, Hisar acted as a Co-Chairman. Three eminent speakers were invited to deliver a talk on different aspects of Food Safety.

Dr. Gyanendra Gongal, Regional Advisor (Food Safety), Regional Office for Southeast Asia, New Delhi, India shared in depth knowledge about the “Chemical Contaminants in Food: Issues and Challenges”. He thoroughly discussed about the different issues related to chemical contaminants in food.

The second speaker, Dr. Sanu Jacob, Director, FSSAI, Govt. of India, New Delhi, India, highlighted on “Eligibility and Applicability criteria of FSSAI for Registration and Licensing of Indian Food Business Operators”. He delivered an excellent lecture on different regulations and formalities, licensing and registration of food businesses in FSSAI.

Dr. Kiran Bhilegaonkar, Principal Scientist & In-Charge, TEC-Pune, Indian Veterinary Research Institute, Pune, presented the topic on “Microbial Contaminants in Food with Special



Celebration of world food safety day by organizing National webinar on “Safe Food Now for a Healthy Tomorrow”

Reference to Foods of Animal Origin”. He had a very fruitful discussion on different microbial contaminants in foods

of animal origin. A total 258 participants across the country attended the webinar.

**National Webinar**  
**“Future Perspectives and Career Opportunities in Veterinary Sciences”**  
**29<sup>th</sup> July, 2021**

In order to make the students aware about entrepreneurship opportunities in veterinary sciences and to motivate them to become a job provider rather than a job seeker, a One-Day National Webinar was organised on “Future perspectives and Career Opportunities in Veterinary Sciences” on 29<sup>th</sup> July 2021. The two dynamic personalities from the field of veterinary sciences; Dr. Mahesh Chander, Head, Division of Extension Education, ICAR-IVRI, Izatnagar, Bareilly and Dr. Rahul Srivastava, Deputy Director, Business Development, Hester Biosciences, Ahmedabad, Gujarat were invited speakers.

The inaugural program was graced by Col. (Dr.) Prof. A. M. Paturkar, Hon’ble Vice-Chancellor, MAFSU, Nagpur; Dr. R. C. Agrawal, DDG (Education) & National Director NAHEP, ICAR, New Delhi; Dr. Prabhat Kumar, National Co-Ordinator, NAHEP-CAAST, ICAR, New Delhi; Dr. V. D.

Aher, DI and Dean, faculty of Veterinary Science, MAFSU, Nagpur; Dr. P. T. Jadhao, Director of Research, MAFSU, Nagpur; Dr. A. P. Somkuwar, Director Extension Education, MAFSU, Nagpur and Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur. Dr. A. S. Rande, Associate Dean and Dr. R. J. Zende, Principal Investigator, NAHEP-CAAST were Course Directors of the program.

Dr. A. P. Somkuwar, Director of Extension Education, MAFSU, Nagpur acted as Chairman while Dr. N. M. Markandeya, Associate Dean, COVAS, Parbhani acted as Co-Chairman.

Dr. Mahesh Chander delivered an excellent lecture on “Opportunities for Higher Agricultural Education in India”. He briefed the participants about the intersection of academics and private sector and gave an imprint about various entrepreneurship opportunity in veterinary sciences citing his personal experiences.





### National webinar “Future perspectives and career opportunities in veterinary sciences”

Dr. Rahul Srivastava presented his invaluable insights on “Opportunities for Entrepreneurship in Livestock Sector” where he quoted several examples of successful entrepreneurs in livestock

sector. The program was attended by a total of 187 participants from the constituent institutes of Maharashtra Animal and Fishery Sciences University.

### National Online Quiz on the occasion of “World Zoonosis Day-2021”



In order to create the awareness about zoonotic diseases, a quiz competition was organized by “Centre of Excellence for Advanced Research on Animal Food Safety” on the occasion of “World Zoonosis Day” in online manner on 6<sup>th</sup> July 2021. Total 169 participants including faculties of veterinary universities, post graduate and Ph.D. students across the country attended the quiz among which 71 participants scored above 65 percent marks and received the appreciation certificate.

**National webinar on**  
**“Capacity Building Workshop for Writing High Impact Research**  
**Articles & Winning Research Proposals”**  
**30<sup>th</sup> July, 2021**

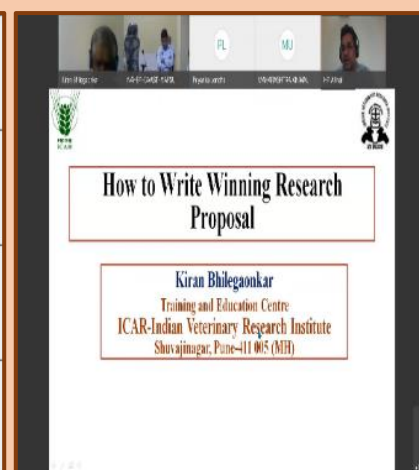
Publication of high impact research articles and writing winning research proposals are the crux of research. Scientists and faculty members essentially require nationally and internationally funded research projects to fulfil the vast demands of growing agricultural and allied sectors. Further, publication of high impact research articles essentially required so as to make the other aware of our findings. Therefore, in order to improve these skills, a one Day National webinar on “Capacity Building Workshop for Writing High Impact Research Articles and Winning Research Proposals” was organized on 30<sup>th</sup> July 2021.

The inaugural program was graced by Col. (Dr.) Prof. A.M. Paturkar, Hon’ble Vice-Chancellor, MAFSU, Nagpur; Dr. R. C. Agrawal, DDG (Education) & National Director NAHEP, ICAR, New Delhi; Dr. Prabhat Kumar, National Co-Ordinator, NAHEP-CAAST, ICAR, New Delhi; Dr. V. D. Aher, DI and Dean, Faculty of Veterinary Science, MAFSU, Nagpur; Dr. P. T. Jadhao, Director of Research, MAFSU, Nagpur; Dr. A. P. Somkuwar, Director of Extension Education, MAFSU, Nagpur; Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur. Dr. A. S. Rande, Associate Dean and Dr. R. J. Zende, Principal Investigator, NAHEP-CAAST were Course Directors of the program.

During technical sessions, Dr. P.T. Jadhao, Director of research, MAFSU, Nagpur acted as a Chairman, Dr. A. U. Bhikane Associate Dean, PGIVAS, Akola acted as a Co-Chairman.

Dr. Hariprasad Aithal, Principal Scientist, TEC, ICAR-IVRI, Pune delivered his lecture on “How to Write a Research Article”. He addressed important points to be considered for writing research articles in high impact journals.

Dr. Kiran N. Bhilegaonkar, Principal Scientist & Station In-charge, TEC, ICAR-IVRI, Pune delivered a comprehensive lecture on “How to Write Winning Research Proposal”. He expressed his views and personal experience on writing a winning research proposal. The webinar was attended by 323 participants all the corners of the country including faculty members from MAFSU and different State Agricultural universities.










National webinar on “Capacity Building Workshop for Writing High Impact Research Articles & Winning Research Proposals”

### Upcoming Events (September -November 2021)

Sr. No.	Training/Workshops/Important events
1	Environmental Health and Safety
2	Implementation of Social Safeguard Policies for Social Equity and Woman’s Safety in Higher Education
3	National Milk Day



University Authorities	
Name and Designation	
	<b>Col. (Dr.) Prof. A. M. Paturkar</b> Vice-Chancellor MAFSU, Nagpur
	<b>Dr. A. P. Somkuwar</b> Director of Instructions and Dean (Veterinary Science) MAFSU, Nagpur
	<b>Dr. N. V. Kurkure</b> Director of Research MAFSU, Nagpur
	<b>Dr. A. U. Bhikane</b> Director of Extension Education MAFSU, Nagpur
	<b>Dr. P. G. Wasnik</b> Dean, Faculty of Dairy Technology MAFSU, Nagpur
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## Research Team

Project Implementing Officer, NAHEP-CAAST		Principal Investigator, NAHEP-CAAST	
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## Co-Principal Investigators

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**A HEALTHY FOOD,  
FOR A WEALTHY MOOD!**





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**Principal Investigator:**

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