

## **Proceedings of XXXVI Annual Convention of Indian Association of Veterinary Microbiologists, Immunologists and Infectious Diseases specialists (IAVMI)**

The XXXVI Annual Convention of Indian Association of Veterinary Microbiologists and Immunologists and Specialists Infectious Diseases (IAVMI)) and National Conference on **“Impact of Animal Health on Human Health and National Prosperity”** was organized at College of Veterinary and Animal Science, Navania, Udaipur, Rajasthan University of Veterinary and Animal Sciences Bikaner during 6-7<sup>th</sup> June, 2024. Dr S.K. Garg, Former Vice Chancellor, DUVASU, Mathura was the chief guest of Inaugural function. Dr B.N.Tripathi, Honorable Vice Chancellor, SKUAST Jammu and Dr. Abhijit Mitra, Animal Husbandry Commissioner DAHD, GOI were the Guest of Honors. The Inaugural session was presided over by Prof.(Dr.) Satish K. Garg, Honorable Vice chancellor, RAJUVAS, Bikaner. Dr A K Tiwari, General Secreatry, IAVMI has appraised the house about socety developments and announced society awards. Dr. Abhijit Mitra, Animal Husbandry Commissioner, DAHD GOI, was conferred with Dr P.G. Pandey Memorial Oration Award-2024. Dr. V. Blalamurugan, Prinicipal Scientist, ICAR-NIVEDI, Prof. Jagadeesh Bayry, Professor IIT, Palakkad and Dr. Satyabrata Dandapat, Retired Professor, IVRI, Izatnagar were awarded with IAVMI fellow for the year 2024. Dr Gulam Mohd and his team was confereed with Dr. C. M. Singh Best Research Paper published in the IJCMIID journal. Afterwards, technical sessions were condcuted at different venues. A total of 6 technical sessions, 3 Poster sessions and 3 special sessions were condcuted during the conference in which lead lectures were delivered by various experts followed by oral presenations.

After the Inaugural Session, Dr. Abhijit Mitra, Commissioner, DAHD, GOI has delivered the Dr P.G. Pandey Memorial Oration leture and session was chaired by Prof. P. K. Uppal, Co-chaired by Dr A.K. Tiwari and Dr Abhishek acted as rapporteur.

The keynote session was chaired by Prof. S. K. Garg, Former Vice Chancellor, DAVASU, Mathura and co-chaired by Dr. S. Dandapat, Retired Principal Scientist, ICAR-IVRI and rapporteur was Dr.Mitesh Gaur, Associate professor, RAJVASU. The first keynote was delivered by Dr. Ashok Kumar, ADG (Animal Health), ICAR, New Delhi on “Integrating Animal Health into One Health Framework: Indian Perspective” and second by Dr. Naveen Kumar, Director, National Institute of Virology, Pune on “LSD Vaccine development: An update”. Dr. Naveen Kumar has elaborated the data on LSD indigenous vaccine effectiveness and the chair and co-chair was in the opinion that the vaccine should be approved by Government of India as early as possible in favor of Indian Dairy industry.

Thereafter, concurrent sessions were conducted. The first Technical Session on **“Oral Session- I- Emerging, re-emerging and Trans-boundary, diseases of Livestock and poultry”** was chaired by Dr. V. Balamurugan and Co-chaired by Dr Kishan K Sharma, Associate Professor, COVAS Dantiwada KDU Gujarat and rapporteur was Dr.Arun Soni, Assistant professor, LPT, CVAS, Navania. Total 04 lead papers including ‘Integration of One health in Rabies Control’ by **Dr Sharada, R**, ‘Prioritizing Animal Tuberculosis Control: Key for Tackling Zoonotic TB in India by **Dr P. Dandapat**, ‘Emerging swine enteric coronaviruses: current status and future implications’ by **Dr. Fateh Singh**, Strategies and Initiatives for Eradication of Peste des Petits Ruminants in India by **Dr. V. Balamurugan** and Emerging and Re-emerging zoonotic fungal diseases in livestock and poultry were delivered by **Dr Abhishek**. Apart from lead papers, 06 oral presentations were also held during the session. I<sup>st</sup> position was awarded to Dr. Fateh Singh whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dr Rakshitjha and Dr B.B. Bhandri.

The Second Technical Session which was on the theme **‘Antimicrobial resistance and novel strategies mitigate it’**. This session was chaired by Dr Rajesh Chhabra, Senior scientist and Head, Department of Veterinary Microbiology, LUVAS, Hisar and Co-chaired by Dr Abhishek, Senior Scientist, ICAR-IVRI and rapporteur was Dr Pankaj, Assistant professor, LUVAS Hisar. Total 03 lead papers one by **Dr Prasad Thomas**, Senior Scientist, IVRI on ‘Harnessing Genome Sequencing for Pathogen and Antimicrobial Resistance (AMR) Surveillance’ and other by **Dr Anju Nayak**, Prof and Head department of Microbiology, CVAS Jabalpur on **‘Antimicrobial resistance and its alternative’** and third was presented by **Harshad Kumar C. Chauhan** on ‘Antimicrobial resistance in non-aureus staphylococci (NAS) evidenced from bovine mastitis and canine pyoderma’ were delivered. Apart from these, 06 oral presentations were also made in the session. I<sup>st</sup> position was awarded to Dr. Anju Nagpal whereas II<sup>nd</sup> and III<sup>rd</sup> positions were secured by Dr. S.S. Patel and Dr. Mamta Gupta and Eshani dixit.

The third Technical Session was on the theme **‘Clinical Microbiology and Public Health - Diagnostics and Therapeutics: Conventional and Modern techniques’**. This session was chaired by Dr D. S. Meena, Dean CDFT, Bassi, Jaipur, RAJUVAS, Bikaner, Co-chaired by Dr Anand Prakash Disease Investigation officer and rapporteur was Dr. L. N. Sankhala Assistant professor, CVAS, Navania, RAJUVAS, Bikaner. Total 03 lead papers one by **Dr Amit Pandey**, Sr Assistant professor, CVAS, Bikaner on ‘From Code to Cure: Understanding and accelerate therapeutics using Machine’ Second was by **Dr Vijay Shriram Bahekar** on Mycobacterium infection in bovines: Zoonotic & reverse-zoonotic implications and third one by **Dr D.S. Meena** Dean, CDFST, Bassi Jaipur on “Analysis of Various Diagnostic Tests for The Detection of Brucellosis In Livestock” were presented. Apart from these, 05 oral presentations were also made in the session. I<sup>st</sup> position was awarded to Dr Knisht Batra whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dr Anshu Lathar and Dr Amit.

On the first day, 3 Poster sessions were also organized. For the first poster session the Judging Committee was chaired by Dr H.C. Chauvhan, Prof. and HOD Veterinary Microbiology COVAS Dantiwada, KAU, Gujarat, Co-chaired by Dr B.B.Bhandri, Head Associate Prof. and HOD Veterinary Microbiology, COVAS, Himmatnagar, Rapporteur was Dr Ram Kumar, Assistant Professor, CVAS, Bikaner. Dr. Rakhi Gangil, Dr. Anandprakash and Dr.U.M.Tumlam were awarded as 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> best poster among faculties/scientists whereas among students Dr M. S. Chandana, Dr. Sai Ram sripada were awarded as 1<sup>st</sup>, 2<sup>nd</sup>, and Dr. Punit Singh and Dr. Vijay Shri Ram jointly awarded 3<sup>rd</sup> best poster in the poster session 1.

In poster session II, the Judging Committee was chaired by Dr Joycee Jogi, Associate Prof Veterinary Microbiology, C.V.Sc.& AH, Mhow, MP, Co-chaired by Dr T Nagandra Reddy, Senior Assistant professor, C.V.Sc., S.V.V.U., Tripauti. Rapporteur was Dr Sonal A. Ingle, Assistant Professor, Nagpur Veterinary College. Dr Shrikant S, were awarded as 1<sup>st</sup>, Dr J. Singh, Dr. Dixit K. Parsanna were awarded as 2<sup>nd</sup> and Rahul Yadav and Nunna Rathnamrutha were awarded as 3<sup>rd</sup> best poster.

In poster session III the Judging Committee was chaired by Dr SubhangiWarke, assistant professor and HOD Veterinary Microbiology, Mumbai veterinary college, Co-chaired by Dr Sonal Ingle, assistant professor and HOD Veterinary Microbiology Mumbai veterinary college. Rapporteur was K.Pureo, Principal Scientist (vety microbiol) Division of Animal and Fisheries Sciences, ICAR RC for NEH Region Umiam, Meghalaya. Dr Lakshmi J Das, Dr. R.A.Hemanth, Dr Annepu Reyathi were awarded as 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> best poster.

On Second day, the Technical Session IV on the theme **“Food safety and Animal Welfare and allied activities for healthy and safe food Production”** was chaired by Dr Uma Tulum, Co- Chaired by Dr Rajesh Singathia, and rapporteur Dr Mahvir Singh S, LUVAS Hisar. One Lead paper on ‘Ensuring safe and sustainable food production: Integrating food safety, animal welfare, and allied practices by **Dr T. Nagendra Reddy** were presented. A total 08 oral presentations were also made in the session. 1<sup>st</sup> position was awarded to Dr. Ankit Jain whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dr Shreya Parashar and Dr K. Puroz, Principal Scientist (vety microbiol), Division of Animal and Fisheries Sciences. ICAR RC for NEH Region Umiam, Meghalaya

The Technical Session V on the theme **“Translational Microbiology research, and Vaccine Biological”** was chaired by Dr B.B. Bhandri, and Co-chaired by Dr Kanisht Batra. Total 02 Lead papers by **Dr K.K. Sharma** on “Sub-genotype vii.2 and the fifth pandemic of Newcastle disease virus’, and by **Dr Shubhangi Warkeon** on ‘Molecular diagnostics in the detection of infectious diseases -An overview’. Beside these, 07 oral papers were also presented. 1<sup>st</sup> position was awarded to Dr. Shweta Dhanda whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dr Shimaakh tarsaiyadand and DR Khushal Singh Solanki and Dr Arpita sain

The Technical Session VI on the theme **“Modern approaches to elucidate host pathogen interactions: Genomics, Metagenomics, Proteomics and Transcriptomics”** was chaired by Dr. M.S. Pawde, and Co-chaired by Dr Rakhi Gangil. Total 01 Lead papers by **Dr K.**

**Puroz** on “Molecular approach targeting genome detection using metagenomics aided the Surveillance and disease diagnosis in Poultry in a varying ecological niche. Beside these, 04 oral papers were also presented. I<sup>st</sup> position was awarded to Dr. Lakshmi K .Das whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dr Dechamma H.J. and Dr Sujata Bhatekar.

Concurrently three special session were also conducted first was on Industries academia interaction session chaired Dr Y.P. S Malik, Joint Director, IVRI, Mukteswar campus co-chaired by Abhishek Gaurav, Assistant professor, VPH, CVAS, Navania. Discussion on LSD vaccine and diagnostics taken place lead paper was presented by Dr Nidhi Samania on LSD Diagnostics . The various issues related to LSD vaccine and vaccination was discussed at length.

Special session second was on Budding vet session specially designed for UG students participation chaired Dr Arpit sain, PhD scholar, IVRI, Co-chaired by Dr.Vinod Kumar Yadav, PhD scholar, CVAS, Navania and Rapporteur Dr Pooja, M.V.Sc. Scholar, CVAS Navnia. Udaipur. Out of 44 participants five students were selected through quiz competition and these selected students participated in the conference and presented a paper on theme of the conference. Beside these, 05 oral presentations were also held .I<sup>st</sup> position was awarded to Arjun Anil whereas II<sup>nd</sup> and III<sup>rd</sup> positions were awarded to Dipesh K.Dabi and Nidhiarora.

Special session Third was on Progressive dairy owners and scientist interaction session specially designed for participation and interaction of local progressive dairy owners with scientist chaired Dr A.K. Gahlot former Vice chancellor, Co-chaired by Dr.B.N. Tripathi and Rapporteur was Dr. Ashok Kumar ADG Animal Health. In this session many scientist and students got direct interaction with progressive dairy owner. Good discussion were held on LSD vaccine prepared from NCVTC Hisar and trials were conducted in Udaipur, Rajasthan. The participants were keen to know that why this vaccine not come in market till date. Beside this many livestock related issued were discussed in details.

The technical sessions were followed by concluding session and award distribution which was chaired by Dr Ajit Kumar Karnatak, Vice Chancellor, MPUAT Udaipur and co-chaired by Dr Prof Dr A. K. Gahlot Former and founder Vice Chancellor, RAJUVAS, Bikaner Prof P.K. Uppal presided over the function.

## **Recommendations**

1. Development of novel immunodiagnostics and immunoprophylactic, which play a key role in improving animal health, production and trade, should be undertaken as a Mission under the umbrella of ‘Make in India’ the indigenous LSD vaccine developed by NCVTC Hisaris under the process of marketing the process should be fasten so that animal can be saved from new LSD outbreak (Action: DDG (AS), ICAR); ICAR-IVRI; DAHD-Gol; APEDA).
2. “One Health” activities on Integrated Disease Surveillance, Epidemiology, Food safety and Zoonoses should be undertaken on priority as per WHO and FAO guide lines to face the threat of emerging and re-emerging infectious diseases in

- particular resources should be diverted in Epidemiology of zoonotic disease in animals (Action: ICAR, ICMR, NITI Ayog; PSA, GoI).
3. Focused research should be conducted on Probiotics, Antimicrobial peptides, Phage and herbal therapy and detection of antimicrobial resistance under field conditions to minimize the use of antibiotics in the food producing animals (Action: DDG (AS), ICAR).
  4. India is a leader in the production of quality animal vaccines including PPR and FMD vaccines in South East Asia and Middle East countries. Therefore, export potential of these vaccines under the "Make in India" venture should be encouraged using relevant virus strains under biocontainment facilities (Action: DAHD, GoI).
  5. Strengthening of State Veterinary Services in terms of trained man-power, infrastructure and mobility to deliver effective vaccination, disease surveillance and monitoring for timely disease control and prevention. (Action: DAHD, GoI).
  6. More Microbiological Diagnostic Labs with appropriate GLP and GMP-compliance should be established urgently in various parts of the country (Action: DAHD-GoI; NITI Ayog; PSA, GoI; DHR-GoI).
  7. A Permanent Task Force on "Exotic/Emerging/Re-emerging Diseases Risk Assessment, Mitigation & Prevention" need to be established on priority (Action: DAHD-GoI; NITI Ayog/ PSA, GoI).
  8. DAHD, GoI should come forward to fund research projects in key areas so that resource crunch should not be a limitation in generating need-based R&D for livestock development in the country (Action: DAHD, GoI).

**Glimpses of XXXVI Annual Convention of Indian Association of Veterinary Microbiologists, Immunologists and Infectious Diseases specialists (IAVMI)**



































**PLOS ONE**

RESEARCH ARTICLE  
**Isolation and characterization of lumpy skin disease virus from cattle in India**

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Shankaranarayanan Rajak<sup>6</sup>, Shreyash Choudhary<sup>7</sup>, Karuprasamy Srinivasakumaran<sup>8</sup>,  
Sandeep Kumar<sup>9</sup>, Akshay Kumar<sup>10</sup>, Maheshwathi K. Gupta<sup>11</sup>, Vasee Pal<sup>12</sup>, Sanjay Barua<sup>13</sup>,  
Bhupendra M. Tripathi<sup>14</sup>

**Virus isolation**

(LSDV/Cattle/India/2019/Ranchi):

- Source of sample: Sick cattle (Ranchi)
- Isolation source: Primary goat kidney cells

**Characterization**

- Whole genome sequencing (GenBank)  
Accession: MW883897;
- Close to Kenyan type LSDV strain (Clade 1.2)

**Virus isolation**

Primary goat kidney cells

1,000 Reads 2019-06-06  
MW883897.1 LSDV-GenBank

**IAVMICON-2024**

INDIAN ASSOCIATION OF VETERINARIAN AND ANIMAL SCIENCES

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