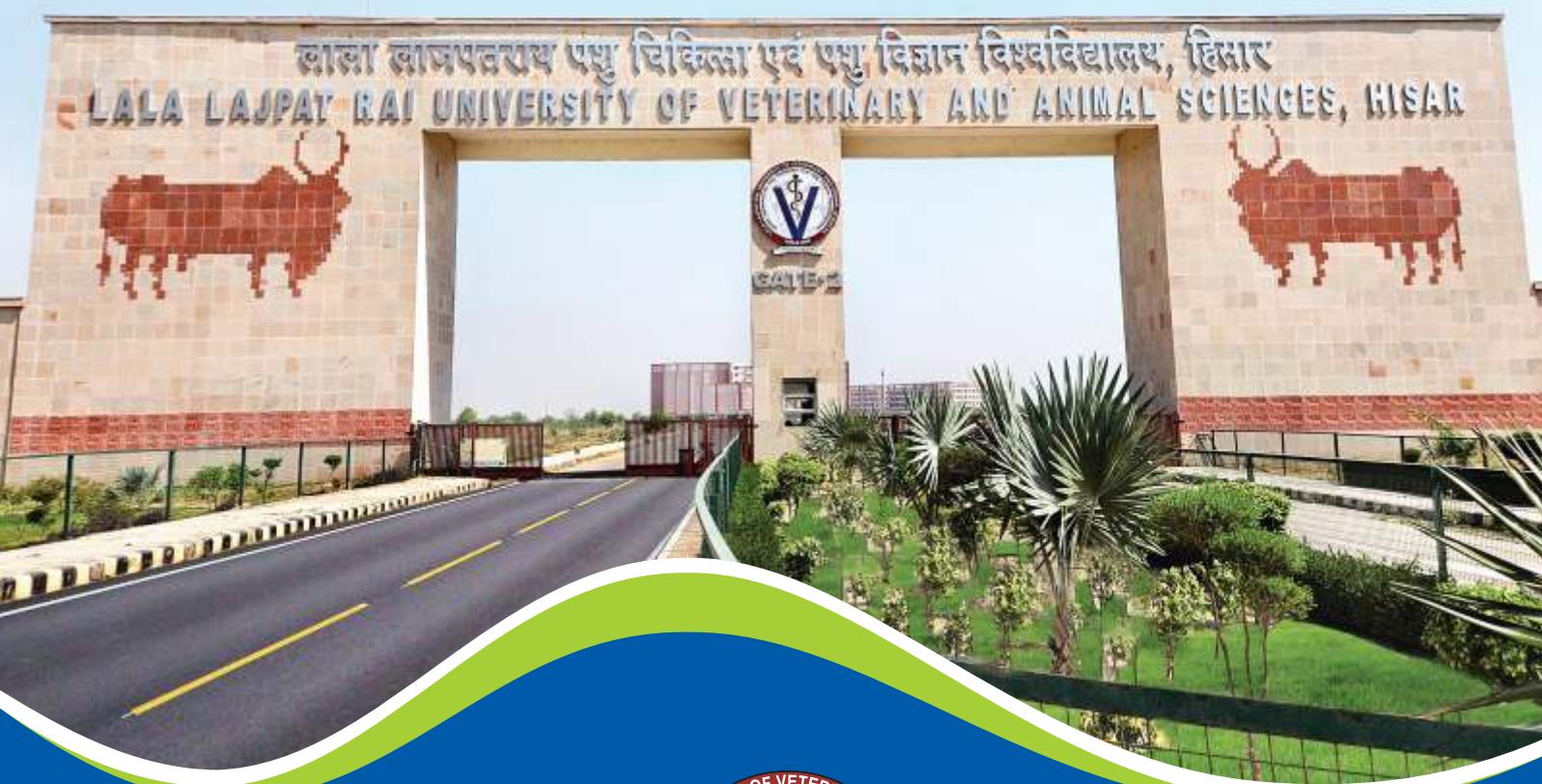


# ANNUAL REPORT

2023-24



**LALA LAJPAT RAI UNIVERSITY OF  
VETERINARY AND ANIMAL SCIENCES**  
Hisar - 125 004 (Haryana)



# LUVAS

## WHERE WE WORK



### LEGENDS

- ▲ Disease Investigation Labs (8)
- Extension Centres/Pashu Vigyan Kendras (10)
- LUVAS Main Campus
- ✚ HPVK (6)



## PATRON

**Dr. Naresh Jindal**

Vice-Chancellor

## EDITORIAL BOARD

### Chief Editor

**Dr. Rajesh Khurana**

Director, Human Resource Management

### Editors

**Dr. (Mrs.) Meenakshi Virmani**

Principal Scientist

(Veterinary Physiology & Biochemistry)

**Dr. Sunil Kumar**

Scientist

(Animal Genetics & Breeding)

**Dr. Jyotsana**

Assistant Professor

(Animal Nutrition)

**Dr. Rachna**

Assistant Professor

(Dairy Business Management)

**Dr. Praveen Kumar**

Assistant Professor

(Veterinary Medicine)

**Dr. Snehil Gupta**

Assistant Professor

(Veterinary Parasitology)

**Dr. Anita Dalal**

Assistant Professor

(Veterinary Microbiology)

## PUBLISHED BY

**Directorate of Human Resource Management**

Lala Lajpat Rai University of Veterinary and Animal Sciences  
HISAR – 125 004 (Haryana) INDIA

**Official Publication of LUVAS**  
**Website: [www.luvas.edu.in](http://www.luvas.edu.in)**



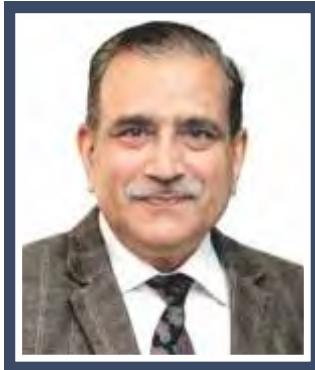


“राष्ट्रीयव्यवं पशुवर्धनम्”





# Preamble



It gives me immense pleasure to present the Annual Report of Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) for the academic year 2023-24. This report reflects the dedication, excellence, and collaborative spirit of our faculty, staff, students, and partners. It captures the achievements and ongoing efforts in teaching, research, and extension that continue to position LUVAS as a leader in veterinary and animal sciences. Established in 2010, LUVAS has grown steadily and gracefully, fulfilling its mandate of advancing veterinary education and improving livestock health and productivity—especially for the benefit of small and marginal farmers. Our initiatives this year have been aligned with our long-term vision of innovation, inclusivity, and sustainability. Notably, we have modern bovine in vitro fertilization (IVF) laboratory equipped with cutting-edge technology at the New Campus. Alongside this, new eco-friendly buildings for the Administrative Block and the College of Dairy Science and Technology have been inaugurated, while construction of hostel for boys and girls is in progress.

Our faculty and students thrive in a dynamic and supportive environment, encouraged to pursue academic excellence, research innovation, and social responsibility. LUVAS offers a range of academic programs including B.V.Sc. & A.H., M.V.Sc., Ph.D., B.Tech., and M.Tech. in Dairy Technology, along with diploma programs such as VLDD and DVLT through the Institute of Para Veterinary Sciences. Our core areas of focus include animal health, production, and management—where technological innovations are actively explored and applied.

The university has boosted its research and academic efforts to foster collaborative research on critical facets of veterinary and animal sciences. More than 225 high-quality research papers were published in reputed national and international journals this year. Our faculty also contributed chapters to books, training manuals, and a variety of extension publications. Research funding was received from multiple sources including RKVY, ICAR, DBT, DST, HSCSIT, etc., enabling us to further achieve our scientific goals. To enhance collaboration and knowledge exchange, LUVAS has signed Memorandums of Understanding (MoUs) with several national and international organizations including GADVASU Ludhiana, Brooke Hospital for Animals, ICAR-CIRG Mathura, Indovax Pvt. Ltd., CellMed Biotech, and others. These partnerships have facilitated joint research, training programs, and field-level interventions. A range of outreach events and celebrations were organized, such as World Veterinary Day, World Milk Day, National Milk Day, World Rabies Day, and International Women's Day. We also inaugurated new units for ophthalmology and pig farming, conducted livestock health camps, and held vocational training for dairy farmers.

On the administrative front, LUVAS has made significant strides in digital transformation through the implementation of a comprehensive e-Governance system and an upgraded university website. These systems have streamlined administrative, academic, and research processes, improving efficiency and accessibility across departments.





The university's progress is the result of collective effort. I sincerely thank our faculty, staff, and students for their dedication and hard work. Special appreciation goes to Dr. Rajesh Khurana, Dr. Meenakshi Virmani, Dr. Sunil Kumar, Dr. Praveen Kumar, Dr. Jyotsana, Dr. Anita Dalal, Dr. Snehil Gupta, and Dr. Rachna for their valuable contributions in compiling and editing this report.

I am also grateful to our alumni and partner institutions whose continued support strengthens our mission. Whether through education, research, or community outreach, every contribution brings us closer to sustainable livestock development and improved farmer welfare. LUVAS is committed to using its "roots and wings" grounded in values and innovation to serve our stakeholders and society. It is my firm conviction that the Annual Report 2023-24 will be a useful resource for professionals at various schools of higher learning, as well as veterinary and dairy institutions across the globe.

**Dr. Naresh Jindal**  
Vice-Chancellor





# Content

S.No.	Contents	Page No.
	Executive Summary	i-vii
1.	About the University	1-4
2.	Organizational Set up Chart	5-6
3.	Management of the University	7-9
4.	Constitution of Statutory Committees	10-15
5.	Functional Units of University	16-24
6.	Classification of University Employees	25-26
7.	Student Enrolment	27
8.	Revenue and Expenditure	28-30
9.	Academics	31-47
10.	Research	48-86
11.	Extension Education	87-96
12.	Extra and Co-Curricular Activities	97-106
13.	Staff Capacity Building	
	A. Faculty participation in Conferences, Symposia and Workshops	107-118
	B. Trainings/Short Courses Attended by the Faculty	118-122
	C. Trainings/Short Courses/Workshops/Conferences Organized by the Faculty	122-124
14.	Patents, Awards and Honours	125-142
15.	Publications	143-170
16.	Collaboration with Academic Institutions and Industry	171-172
17.	Important Events, Eminent Visitors and Achievements	173-182
18.	Expansion of Academic Sections of University	183-185
19.	LUVAS in Media	186-189
20.	Glimpses of LUVAS	190







# Executive Summary

Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, was established through Haryana Legislature Act No. 7 of 2010 and it emerged as a distinct entity from Chaudhary Charan Singh Haryana Agricultural University, Hisar, on December 1, 2010. Various activities of the university are governed by its legislative act and accompanying regulations. The university is dedicated to the well-being of the state of Haryana by leveraging the scientific knowledge and fostering technical advancements to enhance animal health and production. The primary mission of LUVAS is to provide education, advance teaching methodologies, conduct research, and extend education in various branches of veterinary sciences, animal sciences, fishery sciences, and allied disciplines. The university's operations are governed by the Board of Management, with the Governor of Haryana serving as the Chancellor and the Honorary Chairman of the Board. The Vice-Chancellor assumes the role of the working Chairman of the Board and acts as the Principal Executive and Academic Head of the University, while the Academic Council serves as the supreme academic authority.

LUVAS comprises two constituent colleges: the College of Veterinary Sciences and the College of Dairy Sciences and Technology. The former houses 18 well-established departments, including Veterinary Anatomy, Veterinary Physiology and Biochemistry, Veterinary Public Health & Epidemiology, Veterinary Pharmacology & Toxicology, Veterinary Pathology, Veterinary and Animal Husbandry Extension Education, Veterinary Microbiology, Veterinary Parasitology, Animal Biotechnology, Veterinary Gynaecology and Obstetrics, Veterinary Surgery and Radiology, Veterinary Medicine, Livestock Production Management, Animal Genetics and Breeding, Animal Nutrition, Livestock Products Technology, Livestock Farm Complex and Veterinary Clinical Complex. The latter, being the first of its kind in Haryana, consists of 5 departments viz., Dairy Technology, Dairy Engineering, Dairy Chemistry, Dairy Microbiology and Dairy Business Management.

The College of Veterinary Sciences operates two prestigious Teaching Veterinary Clinical Complexes in Hisar and Uchani (Karnal), which not only provide educational facilities but also serve as Referral Veterinary Hospitals for Haryana and neighboring states. Additionally, there is a College Central Laboratory and a Disease-Free Small Animal House.

All the PG and PhD courses are regulated by Dean, Postgraduate Studies. The Directorate of Research (DR) serves as the Nodal Agency for planning, executing, monitoring, and technically evaluating research programs of constituent colleges and outreach research stations. Six Haryana Pashu Vigyan Kendras (HPVKs) have been established at Mahendargarh, Karnal, Kaithal, Bhiwani, Sirsa and Jhajjar to provide services to animal owners and farmers. The Directorate of Extension Education (DEE) functions as an 'outreach service organization' with 10 Pashu Vigyan Kendras (PVKs) to deliver livestock services. The Directorate of Students' Welfare takes responsibility for housing, boarding, welfare, and co-curricular activities for students. It acts as a hub for guidance, counseling, and placement activities across constituent colleges. The Directorate of Human Resource Management focuses on the growth and management of faculty and staff through its four wings: Planning and Evaluation, Staff Training Academy, Intellectual Property Rights and Commercialization and Manpower Assessment.

The Institute of Para Veterinary Sciences, established in February 2014, offers two diploma courses: Veterinary Livestock Development Diploma (VLDD) and Diploma in Veterinary Laboratory Technology (DVLT), each spanning 2 years. Various private institutes in Haryana are affiliated with LUVAS, offering bachelor's degree and diploma courses.

Institutes offering Bachelors of Veterinary Sciences and Animal Husbandry:

1. International Institute of Veterinary Education and Research, Bahu Akbarpur, Distt. Rohtak-124001





2. M. R. College of Veterinary Science, V.P.O Hassanpur, Distt. Jhajjar-124103
3. Sanskaram College of Veterinary and Animal Science, Kheri Taluka, Patauda, Distt. Jhajjar
4. RPS College of Veterinary Sciences, Satnali road, Balana, Distt. Mahendergarh-123029
5. Bhumika Institute of Veterinary Sciences, Siga, Distt. Mahendergarh-123034

### **Institutes offering Veterinary Livestock Development Diploma:**

1. International Institute of Veterinary Education and Research, Bahu Akbarpur, Distt. Rohtak-124001
2. SDS College of Animal Sciences, Damkora Road, Tohana, Distt. Fatehabad-125120
3. Bhumika Institute of Veterinary Sciences, Siga, Distt. Mahendergarh-123034
4. M.R. College of Veterinary Science, V.P.O Hassanpur, Distt. Jhajjar-124103
5. Ideal Veterinary College, Siwani Road, Singhani, Distt. Bhiwani-127201
6. Tagore College of Veterinary Science, Dhigawa Jattan, Distt. Bhiwani-127201
7. Shree Ram College of Veterinary Science, NH- 73, Mouli, Barwala, Panchkula- 134118
8. Janta Institute of Veterinary Sciences, Butana, Distt. Sonepat-131302
9. R.S.M. Veterinary Institute, Bhambhewa, Tehsil Safidon, Distt. Jind-126113
10. Apex Institute of VLDD, Bidhai Khera, Tohana, Distt. Fatehabad -125120
11. Shaheed Baba Deep Singh College of Veterinary Sciences, Ratia, Distt. Fatehabad 125051
12. Sanskaram College of Veterinary & Animal Science, V.P.O Kheri-Taluka, Patauda, Distt. Jhajjar -124108
13. RPS College of Veterinary Sciences, Balana, Satnali Road, Mahendergarh -123029
14. Balaji College of Veterinary Science & Research Center, Near Village Devsar, Distt. Bhiwani, Haryana
15. Sehrawat College of Veterinary Sciences, Hathin, Palwal
16. Rohitash Veterinary College, NH-11 Bypass, Ateli Mandi, Distt. Mahendergarh123021

### **Budget Outlay**

The university budgetary receipts were Rs. 22982.14 lakhs; whereas, the total budgeted expenditure was Rs 18785.95 lakhs for the financial year 2023-24. The sources of funding to the university included about 94.30 % from State Government of Haryana and rest from other funding agencies like Indian Council of Agricultural Research, Department of Biotechnology, Haryana State Council for Science and Technology, Department of Science & Technology, Indian Council of Medical Research etc.

### **Faculty, Staff and Students Profile**

During the period under report, the university had 139 faculty members engaged in teaching, research and extension. These included 25 Professors, 13 Associate Professors and 101 Assistant Professors. There were 315 supporting staff members which included Group A (10), B (12), C (253) and D (40) employees providing essential support in carrying out the mandates of the university. The university had a total strength of 3257 students including 419 in B.V.Sc. & A.H., 99 in B. Tech (Dairy Technology), 125 in Masters, 50 in Ph.D. and 1302 in two of the Diploma programmes (VLDD=1283, DVLT= 19) in IPVS, LUVAS and affiliated colleges.

### **Academics**

The university is engaged in imparting graduate and postgraduate education of excellent quality in the fields of veterinary and animal sciences.

- During the period under report, 33 students were awarded masters (29 M.V.Sc. and 4 M. Tech.) degree and 16 students obtained Ph.D. degree.
- A total of 33 laurels were brought by post-graduate scholars by winning various prestigious awards.
- Postgraduate students attended 37 scientific Conferences/Symposia and 32 training programmes.
- A total of 6 student seminars, 52 credit seminars, 41 synopsis seminars, 43 thesis seminars, and 8 other seminars were delivered during current academic year.

### **Research Highlights**

The University is engaged in extensive research investigations in different disciplines concerning livestock health and productivity. The salient research achievements are:

- During the period under report, 120 research





schemes in various departments including 44 Plan Schemes, 9 Non Plan Schemes, 13 Institutional schemes, 10 Self Financing and 44 externally funded projects were operative.

- Overall lactation yield in Hardhenu, Sahiwal and Haryana cows was 4020.16 kg (288 days), 2170.64 kg (248 days) and 1600.53 kg (230 days), respectively whereas overall wet average of Hardhenu, Sahiwal and Haryana cows was 11.50, 8.18 and 6.80 Kg/day, respectively.
- Average six-month body weights were observed as 20.65 and 19.74 kg in Harnali and Munjal lambs, respectively and the survivability of the flock was 96.95 percent during period of the report.
- Average six-month body weights were recorded as  $18.91 \pm 0.62$  and  $19.22 \pm 0.86$  kg in Beetal and Jakhrana kids, respectively. The corresponding kidding rate was 1.51 and 1.40, respectively.
- Aseel and Kadaknath birds attained average egg production of 73 and 65 eggs with average egg weight of 46 and 43 g. The layer strain pullets produced  $96.27 \pm 0.80$  eggs in 280 days with egg weight of  $52.01 \pm 0.22$  g.
- Isothermal amplification assays (RPA technology) have been developed for rapid detection of Porcine Enterovirus G (PEV-G) and Classical swine fever virus (CSFV). The Polymerase Spiral Reaction (PSR technology) has also been developed for rapid detection of Porcine Enterovirus G (PEV-G). These assays are convenient, rapid, sensitive and specific tools for the diagnosis of important porcine diseases.
- Gold nanoparticles and peptide aptamer magnetic nanoparticles-based assays have been developed for diagnosis of Anthrax.
- The complete genome of Pigeon torque teno virus (PTTV) has been sequenced successfully from biological samples of infected pigeon.
- Differentiating proteins have been detected in HPLC analysis of saliva of early pregnant buffalo.
- A novel protocol has been developed for synthesis of silver nanoparticle using Giloy, Tulsi and Ashwagandha using green synthesis method.
- Feeding buffalo calves with malic acid-treated

Groundnut Cake or the combination with Guar Korma enhanced nutrient digestibility, nitrogen retention, and growth performance, while also significantly lowering methane emissions.

- Feeding growing buffalo calves with rice straw-based complete feed blocks offered nutritional value comparable to wheat straw complete feed blocks or total mixed rations (TMR) regarding palatability, intake, nutrient digestibility, and growth performance.
- Adding Shatavari to the diets of peri-parturient cows enhanced milk production and quality by promoting udder health. This supplementation also helped lowering the risk of sub-clinical mastitis, which poses a significant hidden cost to the dairy industry.
- Supplementing broiler diets with 1% chicory root powder and 0.01% multi-strain probiotics as a substitute for antibiotics enhanced growth performance, gut histomorphology, antioxidant enzyme activity, and beneficial gut microbial populations.
- Supplementing rabbit diets with Chlorella vulgaris enhanced growth performance and nutrient utilization, while adding Spirulina plantensis boosts hemoglobin levels and antioxidant activity.
- Under RKVY Project, Piggery unit was established in the Department of Livestock Farm Complex. Training to pig farmers was also imparted.
- In a study on behaviour of Sahiwal and Haryana cattle, it was observed that the average time spent during concentrate feeding by Haryana and Sahiwal cows was higher in winter compared to summer whereas time spent for watering was higher in summer.
- Moringa oleifera leaf meal (MOLM) supplementation in Murrah buffalo heifers ( $n=18$ ) showed a significant effect on growth traits viz. chest girth and abdominal girths in both treatment groups fed 30 g and 60 g MOLM/day/animal.
- Inclusion of 10% and 15% cottonseed in the concentrate diet of lactating Murrah buffaloes under early, mid and late stage of lactation had a significant role in increasing milk fat, milk protein and total milk solids percentage in comparison to concentrate diet without cottonseed.
- Infrared thermography can be utilized as a promising





methodology for assessing of udder health in *Capra hircus* as a rise in the surface temperature was noticed in affected left and right quarters of the udder.

- Milk candies with very good overall acceptability and natural sweetness, high protein, mineral and phenolic content were prepared by incorporating raw mango fruit and jawa plum individually.
- Garlic flavoured chicken meat chips had significantly higher overall acceptability scores in comparison to control, mint and tomato flavoured chips.
- Dried apple pomace and dried carrot pomace incorporated patties had significantly higher crude fibre content as compared to control patties.
- The incorporation of millet flours resulted in better emulsion stability and water holding capacity of the raw emulsion. Millet treated chips were micro-biologically safe and organoleptically acceptable up to 60<sup>th</sup> day of storage at room temperature.
- An assessment of livelihood security and impact on well-being of rural women Practicing dairy farming in state of Haryana was carried out. In terms of livelihood security, Milk and milk products made a significant contribution to respondents' food security. But in terms of economic security, it was opined that dairy animal keeping contributed in a limited way with relatively lower annual income.
- Blood transfusion in small dogs or cats is a viable solution for treating life threatening anaemia.
- The exogenous melatonin treatment in non-lactating Sahiwal cows during summer reduced the effect of heat stress, increased the blastocyst development rate by increasing the activity of antioxidant enzymes, as well as mRNA expression level of anti-oxidative genes.
- Blastocyst development competence reduced, if follicle size of >20 mm is present on either of the ovary during OPU. So, aspiration of follicle for the in-vitro embryo production in buffalo should be avoided in the presence of follicle size of >20 mm.
- Ozone therapy was found to be cost-effective as compared to Cloprostenol for treatment of sub-clinical endometritis in buffaloes.
- Urine protein to creatinine (UPC) ratio proved to be more reliable in estimating proteinuria as compared to urine dipstick tests. UPC >0.25 could serve as an optimal cut-off for distinguishing between healthy bovines and those with renal disease, with a specificity of 100% and a sensitivity of 59.5%.
- Conventional PCR was found to be more sensitive than microscopy for detecting Babesia infection in dogs.
- Trans-tracheal wash was found to be safe diagnostic technique to examine the lower respiratory tract pathogens in buffaloes.
- Probe based (TaqMan) and dye based (SYBR Green) Real time PCR assays for diagnosis of trypanosomosis in buffaloes were developed, standardized and optimized and was found 1000 times more sensitive than the conventional PCR assay for the diagnosis of *Trypanosoma evansi*.
- The combination of all *Cassia fistula* (bark, pod pulp, and flowers) extracts could serve as a potential substitute for the synthetic acaricide.
- Polyherbal (PH) formulation, prepared by mixing the 200 mg/ml solution of *Moringa oleifera* (Aqueous extract), *Psidium guajava* (Aquamethanolic extract), *Punica granatum* (Aqueous extract) and *Ocimum sanctum* (Aquaethanolic extract) each in the ratio 1:2:4:1, has no acute or delayed toxicity when administered at a dose of 2000 mg/kg body weight orally in Swiss albino male mice.
- Topical application of morin nanoparticles at a concentration of 0.1% promoted enhanced cutaneous wound healing in rats while its oral administration @ 15 mg/kg body weight resulted in notable gastric ulcer healing effects.
- Adoption of blue light in poultry sheds can be helpful in improved growth, behaviour and carcass traits as compared to current lighting practices.
- Silver nanoparticles can be successfully synthesized by a reduction method using *Syzygium aromaticum* (clove) bud extract.
- Biosynthesized silver nanoparticles using alcoholic clove extract were found to possess enhanced



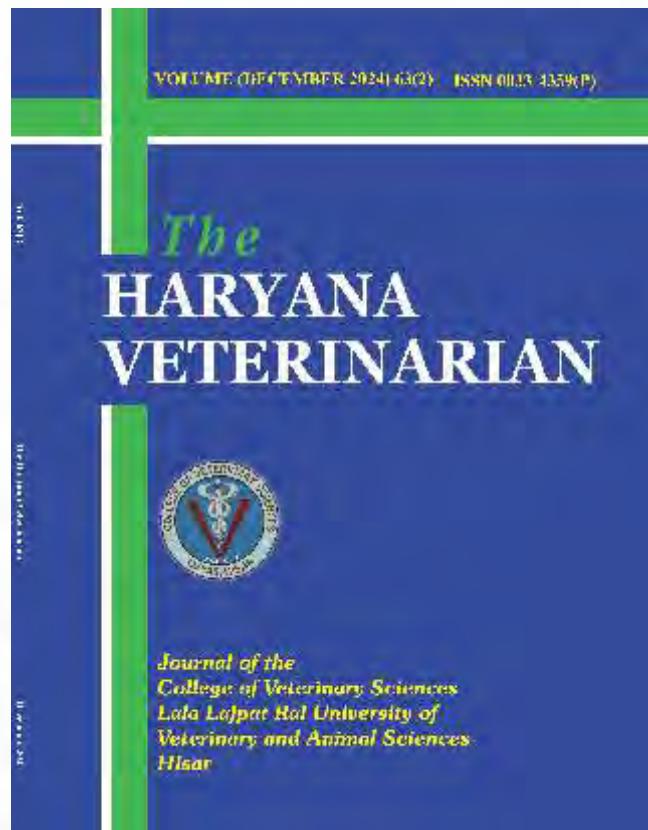


- antibacterial activity against the tested bacteria compared to those synthesized with aqueous clove extract.
- A total of 78 outbreaks of different diseases were investigated in livestock.
- External skeletal fixation (type- II) with centrally threaded Steinman pins alone is better and effective technique for management of metacarpal and metatarsal compound fractures in bovine as compared to its use along with application of PMMA (Polymethyl methacrylate) bone cement on the fracture site.
- Bioactive glass and collagen have similar efficacy for fracture healing in dogs as supportive agent along with internal immobilization.
- Serological evidences of brucellosis detection in males (12/223, 5.38%) by ELISA indicate that brucellosis is affecting bovine male population also.
- A total of 11.36% (10/88) bovines having history of reproductive disorders and serologically negative for brucellosis were found seropositive for Q-fever by ELISA.
- Molecular confirmation of Theileria orientalis in the bovines of Haryana was conducted using molecular markers, specifically the 18S rRNA and MPSP genes.
- Out of 135 milk samples collected from milkmen, 63 samples i.e., 47 percent of samples contained water as an adulterant. Thirty-seven percent samples didn't comply with FSSAI standards for minimum fat percentage, 53 percent samples didn't comply for minimum SNF percentage. Neutralizers (Sodium bicarbonate and/or Sodium carbonate) were detected in 19 samples.
- Development and Characterization of Corn Starch-based Nanocomposite Films with Aloe Vera Conjugated Silver Nanoparticles for Active Packaging Applications indicated that Nanocomposite films exhibited strong antimicrobial activity against *E. Coli* therefore, they are expected to have high potential for the use as active food packaging materials.

### Faculty Accomplishments and Publications

- A total of 08 patents/copyrights were submitted by the faculty

- A total of 68 conferences/symposia/workshops and 39 trainings/short courses were attended by faculty members of the university during the period under report.
- Faculty members of LUVAS were honoured with 121 awards and 32 other honours/recognition at national and international levels.
- The University organised 27 trainings/workshops for benefitting faculty and students.
- The faculty published 229 research papers, 12 review articles, 66 book chapters, 31 chapters in compendiums /training manuals, 11 lead papers, 31 extension/popular articles in various newspapers or farm magazines for the benefit of the farming community. The faculty also edited 4 books and submitted 51 genomic sequences.
- Four Issues of Haryana Veterinarian i.e. September 2023, December 2023, March 2024 and June 2024 issue were published. Brief statistics about contribution of papers is as follows:





Sr. No.	Haryana Veterinarian Issue	September 2023 Volume 62 (SI-2)	December 2023 Volume 62(2)	March 2024 Volume 63 (SI)	June 2024 Volume 63 (1)
1	Research Articles	33	27	24	21
2	Short communications	05	03	07	08
3	Clinical Articles	09	07	10	14
4	LUVAS articles	03	07	10	07
5	Non LUVAS articles	44	30	31	36
<b>Total articles</b>		<b>47</b>	<b>37</b>	<b>44</b>	<b>43</b>

### Extension Education Programmes

The Directorate of Extension Education functions primarily as an outreach service provider. University has established Extension Education Units at various centres in the state and organised a large number of programmes in the state including trainings, demonstrations, Kisan Goshthies and educational lectures.

- Faculty members from different departments delivered 12 radio talks and 01 T.V. talk for the benefit of the farming community.
- A total of 52 Vocational Trainings on dairy, sheep/goat, pig and poultry farming were organized by the Directorate of Extension Education for farmers/ animals owners at various places in the state in which 1972 farmers were benefitted.
- A total of 22 trainings were organized for farmers under project “Upgradation of knowledge and Skill of Scheduled Caste Women and youth to increase Livestock Productivity” funded by ICAR in which 880 farmers were benefitted.
- A total of 12 clinical camps were organized in various districts by the Directorate of Extension Education.
- Twenty villages in various districts were identified and adopted under “Mera Gaon Mera Gaurav” scheme of Govt. of India. Extension activities were carried out frequently in these villages.
- LUVAS participated in Krishi Mela (Rabi) on 08-10 October, 2023 and Krishi Mela (Kharif) on 18-19 March, 2024 which were organized by CCS HAU, Hisar.
- Twenty-five female farmers from Hanumangarh

(Rajasthan) visited the university on 12<sup>th</sup> December, 2023 under one-day CAT- exposure visit sponsored by NABARD.

- Important days like World rabies day, World Milk Day, World Environment Day, Rashtriya Ekta Diwas etc. celebration, Goshthies, Farmers group meeting, Demonstration, Extension camps, farm visits and other activities were conducted at different villages of Haryana.

### Extra-Curricular Activities

The university ensures students' participation in extra-curricular activities as compulsory. Every undergraduate student is said to involve oneself at least in one of the approved games and cultural activities in order to fulfil the requirement of the degree. During the period under report, the university students and staff participated in various events.

- SPIC MACAY programme was organized by DSW, LUVAS on classical dance form of “Bharatnatyam” performed by Ms Ragini Chandershekhar.
- National Voters' Day was celebrated on 25 January, 2024 with the aim to ensure active participation of voters during elections.
- 159<sup>th</sup> Birth Anniversary of Lala Lajpat Rai was celebrated on 28 January, 2024. Worthy Vice Chancellor and Officers of the University paid homage to freedom fighter Lala Lajpat Rai.
- “Swachhta Abhiyan” organized on Mahatma Gandhi Martyrdom day at LUVAS campus to pay tributes to the Father of Nation.





- Students, staff and teachers participated in the plantation drive on the occasion of World Environment Day.
- International Yoga Day was celebrated on 21<sup>st</sup> June, 2024. Statutory officers, faculty, non-teaching employees and students participated in yoga activities at the occasion of Yoga Day.
- Counselling and Placement Cell, Directorate of Students' Welfare organized talk by two young successful entrepreneurs, also alumni of Lala Lajpat Rai University of Veterinary and Animals Sciences.
- Our cadets of 1 Har R&V Sqn NCC, Hisar participated in Republic Day Camp-2024.
- Cadet Rahul won silver medal in poster making

competition at EBSB1, Malerkotla, Punjab and Cadet Tarun Kadian won Bronze medal in tug of war and Silver medal in debate competition at NCC trekking expedition organized from October 20-27, 2023 by UP Dte.

#### **Collaboration with Other Authorities and Institutes**

- LUVAS signed 12 Memorandum of Understanding (MoUs) with various colleges and institutes of national and international repute during the period under report.

#### **Preparation of reports**

- Prepared Annual Progress Report of Strengthening and Development Grant to Agricultural Universities (2022-23); Annual Report of LUVAS (2022-23); ICAR Ranking Report and NIRF Ranking Report.







## ABOUT THE UNIVERSITY

### Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar

(Established on 1<sup>st</sup> December, 2010, in pursuance of the Haryana Act No. 7 of 2010 notified on 7<sup>th</sup> April, 2010.)

The University is situated within the Chaudhary Charan Singh Haryana Agricultural University (CCSHAU) campus in Hisar, approximately 172 km northwest of Delhi. It was established on December 1, 2010, through Haryana Legislature Act No. 7 of 2010, following its severance from CCSHAU. The University comprises two constituent colleges and one Institute of Para Veterinary Sciences. The College of Veterinary Sciences (COVS) is the initial academic unit of the University engaged in graduate, postgraduate, and doctoral education, along with research and extension programs in veterinary and animal sciences. The college traces its origins to the first Veterinary School established in Lahore in 1882, in the undivided India. After the establishment of Haryana Agricultural University (HAU) in 1970, the college became a constituent part of HAU. It became a constituent college of Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) following the establishment of University in 2010. This college has built a legacy of academic excellence, producing highly skilled human resources. A large number of its alumni have been topmost functionaries in many prestigious academic and research institutions in India and abroad. Apart from this, the graduates and postgraduates of this college have made significant contributions to the White Revolution and food security in the state as well as in the country. The College of Dairy Sciences and Technology (CoDST), the second constituent college of LUVAS, was the first institution in Haryana dedicated to dairy science and technology. Approved by the Board of Management in November 2013, CoDST began operations in the 2016-17 academic session. The primary mission of the college is to train highly qualified dairy specialists through value-based education, research, and training, addressing the technological and societal needs of the dairy industry. The Institute of Para Veterinary Sciences (IPVS) was established in February 2014 with a sense of clarity and purpose of producing Para-Veterinarians to assist the Registered Veterinary Practitioners. The Institute offers two diploma programs,

each with duration of two years: the Veterinary Livestock Development Diploma (VLDD) and the Diploma in Veterinary Laboratory Technology (DVLT). Currently, 16 private colleges have been affiliated with LUVAS that are offering both degree and diploma courses. The University is committed to expanding its academic offerings by introducing additional allied faculties, such as Fisheries, Animal Biotechnology, and Livestock and Rural Management in a phased manner. In line with its growth plans, the University aims to establish a state-of-the-art super-specialty diagnostic laboratory and epidemiological center, equipped with BSL-3 facilities to monitor emerging and re-emerging diseases. Additionally, the University plans to set up an Institute of Laboratory Animal Sciences, a Central Animal House Facility, and a Post-mortem Centre with cutting-edge infrastructure. The University is actively collaborating with line departments to facilitate the rapid transfer of technology from research labs to end-users and strengthen its extension services, ensuring that advancements reach those in need efficiently and effectively.

The University is developing a state-of-the-art, environmentally sustainable campus designed with energy efficiency, incorporating vertical expansion and green building principles. The construction of the Administrative Block and the College of Dairy Science and Technology is complete and ready for occupancy, while the Bovine *in-vitro* Fertilization (IVF) laboratory is already fully operational. The construction of residential accommodation for the employees of the university and hostel for boys and girls has been completed. LUVAS has played a pivotal role in the growth of livestock industry, particularly for rural development through its wide-ranging operations. In less than fifteen years, the University has achieved significant milestones in both academics and its extension services, bridging the gap between laboratory research and the practical needs of animal owners. LUVAS is dedicated to improving the well-being of farmers and communities





guided by the 'One World, One Health' concept of World Health Organization. The contributions of the University extend beyond advancements in diagnostics, treatment protocols, and animal productivity; its scientists are actively engaged in integrated research on veterinary, animal husbandry, and dairy science to address emerging challenges in these fields. The primary focus of research at LUVAS revolves around advancing technologies in livestock health, including diagnostics and treatment strategies, as well as production and management techniques. To enhance its research and academic endeavors, the University has forged numerous national and international collaborations through Memoranda of Understanding (MoUs), aiming to promote joint research in key areas of veterinary and animal sciences. Over the years, LUVAS has been committed to achieving its scientific objectives by securing research grants from various sources, including state-level funding (both plan and non-plan), self-financed initiatives, and external agencies such as ICAR-NASF, RKVY, DBT, DST, ICMR, MOFPI, and HSCST, etc. The innovative technologies developed across multiple disciplines are being effectively transferred to the end-users—livestock farmers, dairy entrepreneurs, extension workers, and the broader industry—through efficient communication channels. This ensures that the University's research directly benefits those in the field, bringing cutting-edge solutions to farmers' doorsteps.

The establishment of this independent University of Veterinary and Animal Sciences has provided a long-awaited boost to the sector. It is making a long awaited impact by contributing to social justice and equality, particularly by improving the livelihoods of animal owners, many of whom belong to the under-privileged segment of the society.

## Mandate

The functions of the university are governed by the Act of the University and the regulations made there under. The Act has given the following mandate to the university:

- Imparting education in different branches of veterinary sciences, animal sciences, fishery sciences and allied sciences as it may determine from time to time.
- Further advancement in learning and research in veterinary sciences, animal sciences, fishery sciences and other allied sciences and to undertake

extension of such specialized knowledge to the needy people.

- To undertake study in marketing strategies of livestock and livestock products, conservation of livestock breeds and wild animals.
- To liaison and establish vital linkage with the concerned Departments of Animal Husbandry, Fisheries and Dairy Development of the State Government and Union Government, National and International Research Institutes specialized in the field of veterinary and animal sciences, fishery sciences and allied sciences with a view to keep abreast of the latest technology.
- To raise level of veterinary study to international standards.

## Objectives and Goals

The major goals and objectives of the University are:

- To provide facilities for instruction, training and research in veterinary and animal sciences, fishery sciences and allied sciences.
- To achieve excellence therein and connected fields.
- To provide for dissemination of the findings of research and technical information through extension education.
- To institute degree, diploma, certificate and other academic distinction in veterinary and animal sciences, fishery sciences and allied sciences.
- To hold examination and to confer degree, diploma, certificate and other academic distinction on person, who has pursued a particular course of study; or carried out research in the university in the manner, as may be prescribed.
- To confer honorary degree or other academic distinction in the manner as may be prescribed.
- To arrange lectures and instructions for field workers, livestock farmers and other persons, not enrolled as regular students of the University and to grant certificates to them, if necessary.
- To cooperate with other universities, institutions, organizations and authorities in such manner and for such purposes, as may be determined.
- To establish and maintain colleges and institutions





relating to veterinary sciences, animal sciences, fishery sciences and allied sciences.

- To affiliate any college or an institution to the university and to withdraw affiliation there from.
- To establish and maintain laboratories, libraries, research stations, processing plants and museums for teaching, research and extension education.
- To institute, suspend or abolish Professorship, Associate Professorship, Assistant Professorship, Teachership and other teaching, research and extension posts in the University and to make suitable appointments thereto.
- To create, suspend or abolish administrative and other posts and to appoint other persons to such posts.
- To institute, abolish or suspend fellowships, scholarships, studentships, bursaries, exhibitions, medals and prizes in accordance with the Statutes and Regulations and to undertake publication of work of merit and research pertaining to research in veterinary sciences, animal sciences, fishery sciences and allied sciences.
- To establish and maintain hostels for students and residential accommodation for the employees of the University,
- To supervise, control and regulate the conduct and discipline of the students of the University and affiliated colleges,
- To manage and control the movable and immovable properties of the University,
- To receive gifts, donations or benefactions in cash or kind from the Government or a person and to create corpus fund for the welfare of the University provided that no donation from a foreign country, foreign foundation or any individual in such country or foundation shall be accepted by the University, save with the approval of the State Government or other competent authority.
- To accept grant from any institution or any other authority recognized by Government of India and the State Government.
- To borrow money with or without security for the

purposes approved by the State Government, from the Central Government, any other State Government, Indian Council of Agricultural Research or any other incorporated body, subject to the provisions of the Act.

- To maintain an employment bureau, and
- To do all such other acts and things, whether incidental to the functions aforesaid or not, as may be required in order to further the objectives of the University.

## CONSTITUENT COLLEGES/INSTITUTIONS

### College of Veterinary Sciences (COVS)

The College has the following departments, units and Haryana Pashu Vigyan Kendras/Pashu Vigyan Kendras:

#### Departments

- Animal Biotechnology
- Animal Genetics and Breeding
- Animal Nutrition
- Livestock Farm Complex
- Livestock Production Management
- Livestock Products Technology
- Veterinary Anatomy
- Veterinary and Animal Husbandry Extension Education
- Veterinary Clinical Complex
- Veterinary Gynaecology and Obstetrics
- Veterinary Medicine
- Veterinary Microbiology
- Veterinary Parasitology
- Veterinary Pathology
- Veterinary Pharmacology and Toxicology
- Veterinary Physiology and Biochemistry
- Veterinary Public Health and Epidemiology
- Veterinary Surgery and Radiology

#### Units

- College Central Laboratory
- Disease Free Small Animal House





## Haryana Pashu Vigyan Kendras/Pashu Vigyan Kendras

- Haryana Pashu Vigyan Kendra, Uchani, Karnal
- Haryana Pashu Vigyan Kendra, Riwasa, Mahendergarh
- Haryana Pashu Vigyan Kendra, Lakaria, Jhajjar
- Haryana Pashu Vigyan Kendra, Keorak, Kaithal
- Haryana Pashu Vigyan Kendra, Makhusrani, Sirsa
- Haryana Pashu Vigyan Kendra, Behal, Bhiwani
- Pashu Vigyan Kendra, Ambala
- Pashu Vigyan Kendra, Bhiwani
- Pashu Vigyan Kendra, Gurugram
- Pashu Vigyan Kendra, Jind
- Pashu Vigyan Kendra, Kaithal
- Pashu Vigyan Kendra, Palwal
- Pashu Vigyan Kendra, Rewari
- Pashu Vigyan Kendra, Rohtak
- Pashu Vigyan Kendra, Sirsa
- Pashu Vigyan Kendra, Sonipat

## College of Dairy Sciences and Technology (CoDST)

The college has following departments:

- Dairy Business Management
- Dairy Chemistry
- Dairy Engineering
- Dairy Microbiology
- Dairy Technology

## Institute of Para Veterinary Sciences (IPVS)

The Institute is running two diploma courses each of two-year duration:

- Veterinary Livestock Development Diploma (VLDD)
- Diploma in Veterinary Laboratory Technology (DVLT)

## List of Private Colleges Affiliated to LUVAS

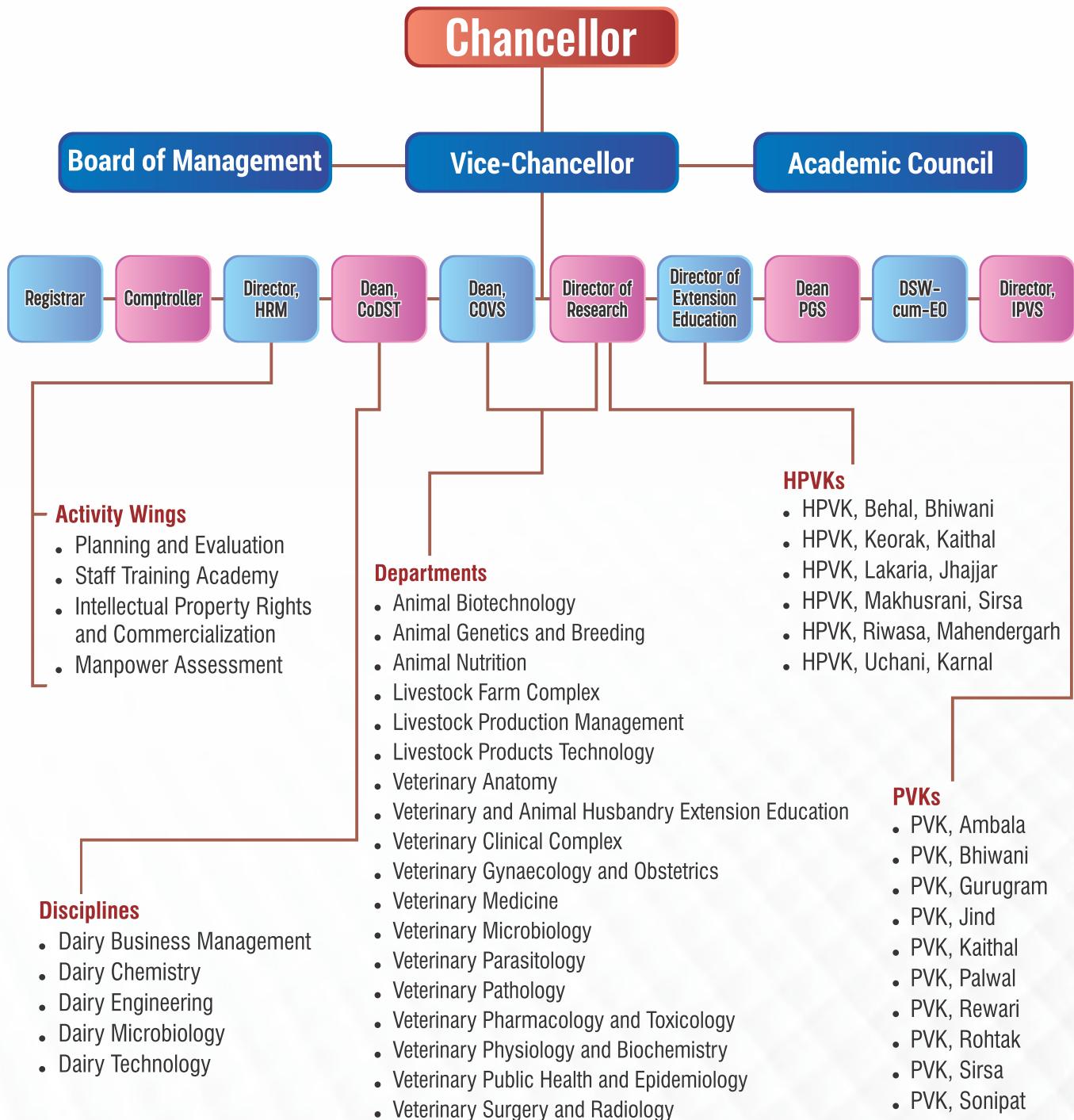
1. International Institute of Veterinary Education and

2. Research, Bahu Akbarpur, Distt. Rohtak-124001
3. SDS College of Animal Sciences, Damkora Road, Tohana, Distt. Fatehabad-125120
4. Bhumika Institute of Veterinary Sciences, Sigrā, Distt. Mahendergarh-123034
5. M. R. College of Veterinary Science, V.P.O Hassanpur, Distt. Jhajjar-124103
6. Ideal Veterinary College, Siwani Road, Singhani, Distt. Bhiwani-127201
7. Tagore College of Veterinary Science, Dhigawa Jattan, Distt. Bhiwani-127201
8. Shree Ram College of Veterinary Science, NH-73, Mouli, Barwala, Panchkula- 134118
9. Janta Institute of Veterinary Sciences, Butana, Distt. Sonepat-131302
10. R.S.M. Veterinary Institute, Bhambhwā, Tehsil Safidon, Distt. Jind-126113
11. Apex Institute of VLDD, Bidhai Khera, Tohana, Distt. Fatehabad -125120
12. Shaheed Baba Deep Singh College of Veterinary Sciences, Ratia, Distt. Fatehabad 125051
13. Sanskaram College of Veterinary and Animal Science, Kheri Taluka, Patauda, Distt. Jhajjar-124103
14. RPS College of Veterinary Sciences, Satnali road, Balana, Distt. Mahendergarh-123029
15. Balaji College of Veterinary Science & Research Center, 8km stone Bhiwani-Loharu Road, Kusumbhi Mor, Near Village Devsar, Distt. Bhiwani-127201
16. Sehrawat College of Veterinary Sciences, VPO Hathin, Distt. Palwal-121103
17. Rohitash Veterinary College, Ateli Mandi, Distt. Mahendergarh-123029





# ORGANIZATIONAL SET-UP CHART OF UNIVERSITY ADMINISTRATION





## IMPORTANT MEETINGS ORGANIZED

Board of Studies	Date
Meeting No. 311	06.07.2023
Meeting No. 312	27.07.2023
Meeting No. 313	16.08.2023
Meeting No. 314	05.09.2023
Meeting No. 315	13.09.2023
Meeting No. 316	18.10.2023
Meeting No. 317	02.12.2023
Meeting No. 318	12.01.2024
Meeting No. 319	21.03.2024
Meeting No. 320	30.03.2024
Meeting No. 321	03.05.2024
Meeting No. 322	20.05.2024
Meeting No. 323	27.05.2024

Academic Council	Date
Meeting No. 63	01.07.2023
Meeting No. 64	18.09.2023
Meeting No. 65	08.12.2023
Meeting No. 66	02.02.2024
Meeting No. 67	29.03.2024
Meeting No. 68	01.06.2024





# MANAGEMENT OF THE UNIVERSITY

## BOARD OF MANAGEMENT

The Board of Management (BOM) is the policy making body responsible for management of the university. The Chancellor is the Honorary Chairman and the Vice-Chancellor is the working Chairman of the Board.

### Constitution of the Board of Management



**Honorary Chairman**  
**Shri Bandaru Dattatraya**

Honorable Governor of Haryana-cum-Chancellor, LUVAS

### OFFICIAL MEMBERS



**Working Chairman**  
Vice-Chancellor, LUVAS, Hisar  
**Prof. (Dr.) Vinod Kumar Verma**



**Chief Secretary**  
Government of Haryana, Chandigarh  
**Sh. T.V.S.N. Prasad, IAS**



**Additional Chief Secretary**, Govt. of Haryana  
Finance and Planning Department, Chandigarh  
**Sh. Anurag Rastogi, IAS**



**Additional Chief Secretary**, Govt. of Haryana  
Animal Husbandry & Dairying Department, Haryana  
**Sh. Ankur Gupta, IAS**



**Deputy Director General** (Animal Science)  
ICAR New Delhi  
**Dr. Raghavendra Bhatta**



**Member Secretary**  
Registrar, LUVAS, Hisar  
**Dr. S.S. Dhaka**

#### Technical Advisors

1. Director General, Animal Husbandry & Dairying Deptt. Haryana, Panchkula
2. Director, Fisheries Department, Haryana, Panchkula
3. Dean, COVS, LUVAS, Hisar
4. Director of Research, LUVAS, Hisar
5. Dr. Vijay Kumar Jha, Member VCI

#### Non Official Members

1. Dr. Naveen Kumar (Hisar)
2. Dr. Jaipal Tanwar (Panipat)
3. Sh. Sandeep Jhinhja (Sirsa)
4. Smt. Neelam Arya (Jhajjar)
5. Dr. Umesh Batra (Hisar)
6. Sh. Baljeet Kalirawna (Hisar)  
{Upto 19.08.2023}

#### Invited Members

1. Comptroller, LUVAS, Hisar
2. President, LUVASTA, Hisar
3. President, LUVASNTEA, Hisar





## ACADEMIC COUNCIL

The Academic Council is the supreme body administering the academic activities of the university. It has the responsibility to direct, control and supervise the academic affairs of the university and to maintain the standard of education and other academic matters. It also exercises such other powers and performs such other duties as may be prescribed. The constitution of the academic council during the period was as follows:

### **Chairman**

Vice-Chancellor

**Prof. (Dr.) Vinod Kumar Verma**

### **Member-Secretary**

Registrar, LUVAS

**Dr. S.S. Dhaka**

### **Members**

1. Director of Research

**Dr. Naresh Jindal**

2. Dean, College of Veterinary Sciences

**Dr. Gulshan Narang**

3. Dean, Post-graduate Studies

**Dr. Manoj Kumar Rose**

4. Dean, College of Dairy Science & Technology

**Dr. Naresh Jindal** (upto 15.09.2023)

**Dr. Sajjan Sihag** (15.09.2023 onwards)

5. Director of Extension Education

**Dr. Manoj Kumar Rose** (15.09.2023)

**Dr. V.S. Panwar** (15.09.2023 onwards)

6. Head of Departments

**Dr. Y.S. Rana** (upto 03.10.2023)

Department of Veterinary Medicine

**Dr. Sonia Sindhu** (04.12.2023 onwards)

Department of Veterinary Physiology and Biochemistry

**Dr. Sukhdeep Vohra**

Department of Veterinary Parasitology

**Dr. A.K. Pandey**

Department of Veterinary Gynecology and Obstetrics

**Dr Trilok Nanda** (upto 29.07.2023)

Department of Animal Biotechnology

**Dr. Sanjay Yadav** (05.09.2023 onwards)

Dept. of Livestock Products Technology

**Dr. Sajjan Sihag** (upto 24.06.2024)

Department of Animal Nutrition

**Dr. Sharangouda B. Patil** (05.09.2023 onwards)

Department of Dairy Technology

### **Invitees**

1. Director, Human Resource Management

**Dr. S.S. Dhaka** (upto 15.09.2023)

**Dr. Rajesh Khurana** (16.09.2023 onwards)

2. Director Students' Welfare-cum-Estate Officer, LUVAS

**Dr. D.S. Dalal** (upto 15.09.2023)

**Dr. Pawan Kumar** (18.09.2023 onwards)

3. Director IPVS

**Dr. S.P. Dahiya** (upto 30.04.2024)

**Dr. Pawan Kumar** (01.05.2024 onwards)

4. President, LUVASTA

5. Secretary, LUVASTA





## BOARD OF STUDIES

Board of Studies (BOS) is responsible for proposing new courses, curricula modifications, etc for the programs offered by the college. It also reviews the standard of teaching regularly. The Dean of the College of Veterinary Sciences functions as Chairman of BOS and all Heads of the Departments are its members. The constitution of the BOS during the period under report was as follows:

### Chairman

Dean College of Veterinary Sciences

**Dr. Gulshan Narang**

### Member Secretary

**Dr. Vikas Nehra**

Head, Department of Veterinary Pathology

### Members

#### 1. **Dr. Anand Kumar Pandey**

Head, Department of Veterinary Gynecology and Obstetrics

#### 2. **Dr. Gautam**

Head, Department of Veterinary Animal Husbandry Extension Education

#### 3. **Dr. Parveen Kumar Gahlot**

Head, Department of Veterinary Anatomy

#### 4. **Dr. R.N. Chaudhary**

Head, Department of Veterinary Surgery and Radiology

#### 5. **Dr. Rajesh Khurana**

Head, Department of Veterinary Public Health & Epidemiology

#### 6. **Dr. Rajesh**

Head, Department of Veterinary Microbiology and Incharge, College Central Laboratory

#### 7. **Dr. Devender Singh Bidhan**

Head, Department of Livestock Production Management

#### 8. **Dr. Sajjan Sihag**

Head, Department of Animal Nutrition

#### 9. **Dr. Sanjay Yadav**

Head, Department of Livestock Products Technology

#### 10. **Dr. Sonia Sindhu**

Head, Department of Veterinary Physiology and Biochemistry

#### 11. **Dr. Sukhdeep Vohra**

Head, Department of Veterinary Parasitology

#### 12. **Dr. Trilok Nanda** (upto 29.07.2023)

**Dr. Sushila Maan** (31.07.2023 onwards)

Head, Department of Animal Biotechnology

#### 13. **Dr. Vikas Nehra**

Head, Department of Veterinary Pathology

#### 14. **Dr. Virender Singh Panwar**

Head, Department of Livestock Farm Complex

#### 15. **Dr. Yudhbir Singh**

Head, Department of Veterinary Medicine

#### 16. **Dr. Z.S. Malik** (upto 31.12.2023)

**Dr. S.P. Dahiya** (upto 30.04.2024)

**Dr. Gulshan Narang** (01.05.2024 onwards)

Head, Department of Animal Genetics and Breeding

#### 17. **Dr. Gyan Singh**

Head, Department of Veterinary Clinical Complex

#### 18. **Dr. Gulshan Narang**

HOD, Department of Veterinary Pharmacology & Toxicology

### Invitees

#### 1. Registrar

**Dr. S.S. Dhaka**

#### 2. Controller of Examination

**Dr. S.K. Gupta**

#### 3. Director, IPVS

**Dr. S.P. Dahiya** (upto 30.04.2024)

**Dr. Pawan Kumar** (01.05.2024 onwards)

#### 4. Dean, College of Dairy Sciences and Technology

**Dr. Naresh Jindal** (upto 15.09.2023)

**Dr. Sajjan Sihag** (15.09.2023 onwards)

#### 5. Director Students' Welfare-cum-Estate Officer, LUVAS

**Dr. D.S. Dalal** (upto 15.09.2023)

**Dr. Pawan Kumar** (18.09.2023 onwards)





## 4

# CONSTITUTION OF STATUTORY COMMITTEES

The supreme academic authority of the university is the Academic Council. It is also responsible for constitution of various statutory committees.

### **Students' Welfare Committee**

The committee advises the Vice-Chancellor regarding the allocation of funds for various students' welfare activities; formulation of rules to regulate the conduct of students; formulation of procedure for taking punitive action against a student on charge of indiscipline or misconduct and all matter related to the welfare and discipline of students. The constituted students' welfare committee during the period under report is as under:

#### **Ex-officio Chairman**

Director Students' Welfare-cum-Estate Officer, LUVAS

**Dr. D.S. Dalal** (Upto 15.09.2023)

**Dr. Pawan Kumar** (18.09.2023 onwards)

#### **Member Secretary**

Senior Most Additional Director Students' Welfare

**Dr. Devender Singh**

#### **Members**

1. Dean, Post-graduate Studies

**Dr. Manoj Kumar Rose**

2. Dean, COVS, LUVAS, Hisar

**Dr. Gulshan Narang**

3. Dean, College of Dairy Science & Technology

**Dr. Naresh Jindal** (Upto 15.09.2023)

**Dr. Sajjan Sihag** (15.09.2023 onwards)

4. Director of Research

**Dr. Naresh Jindal**

5. Director of Extension Education

**Dr. Manoj Kumar Rose** (Upto 15.09.2023)

**Dr. V.S. Panwar** (15.09.2023 onwards)

6. Director, Human Resource Management

**Dr. S. S. Dhaka** (Upto 15.09.2023)

**Dr. Rajesh Khurana** (16.09.2023 onwards)

7. Director, IPVS

**Dr. S.P. Dahiya** (Upto 30.04.2024)

**Dr. Pawan Kumar** (01.05.2024 onwards)

### **Research Programme Committee (RPC)**

The committee decides the allocation of funds for research; the conditions for accepting grant and other related matters related to the research programme of the university. The constituted Research programme Committee is as under:

#### **Chairman**

Vice-Chancellor

**Dr. Vinod Kumar Verma**

#### **Member Secretary**

Director of Research

**Dr. Naresh Jindal**

#### **Members**

1. Dean, College of Veterinary Sciences

**Dr. Gulshan Narang**

2. Dean, College of Dairy Sciences and technology

**Dr. Naresh Jindal** (Upto 15.09.2023)

**Dr. Sajjan Sihag** (15.09.2023 onwards)

3. Director of Extension Education

**Dr. Manoj Kumar Rose** (Upto 15.09.2023)

**Dr. V.S. Panwar** (15.09.2023 onwards)

4. Dean, Post Graduate Studies

**Dr. Manoj Kumar Rose**

5. Director General, Animal Husbandry and Dairying, Haryana

6. Director of Fisheries, Haryana

7. Director Research, CCS HAU, Hisar

8. Director, Central Institute for Research on Buffaloes, Hisar





9. Director, National Research Centre on Equines, Hisar
10. Director, Indian Veterinary Research Institute, Izatnagar, Bareilly

#### Special Invitees

1. Co-ordinator Research (Planning and Monitoring)  
**Dr. Swati Dahiya** (16.07.2023 onwards)
2. Comptroller, LUVAS  
**Sh. Surender Kumar**

#### Extension Education Advisory Committee (EEAC)

The committee decides the co-ordination of university extension education programme with the state and national programme; the allocation of funds for extension education work and ways and means of increasing the effectiveness of University's extension education program. The constituted EEAC committee is as follows:

#### Chairman

Vice-Chancellor

**Dr. Vinod Kumar Verma**

#### Member Secretary

Director of Extension Education

**Dr. Manoj Kumar Rose** (Upto 15.09.2023)

**Dr. V.S. Panwar** (15.09.2023 onwards)

#### Members

1. Director of Research  
**Dr. Naresh Jindal**
2. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
3. Comptroller, LUVAS  
**Sh. Surender Kumar**
4. Director Students' Welfare-cum-Estate Officer, LUVAS  
**Dr. D.S. Dalal** (Upto 15.09.2023)  
**Dr. Pawan Kumar** (18.09.2023 onwards)
5. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
6. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (Upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)

7. Director, IPVS  
**Dr. S.P. Dahiya** (Upto 30.04.2024)  
**Dr. Pawan Kumar** (01.05.2024 onwards)
8. Registrar  
**Dr. S.S. Dhaka**
9. Director, Human Resource Management  
**Dr. S.S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)
10. Director General, Animal Husbandry and Dairying, Haryana
11. Director of Fisheries, Haryana
12. Managing Director, Haryana Livestock Development Board
13. Director, Extension Education, CCS HAU, Hisar
14. Director, CIRB, Hisar
15. Assistant Director General, (AE), ICAR, New Delhi
16. Chairman, Farutsav, F.P.O. Bahal, Bhiwani
17. Chairman, The Badhana Farmers Producer's company Ltd Nagura (Jind)

#### Affiliation Committee

The Committee is responsible for framing of rules for affiliation and de-affiliation of a college within the state of Haryana; granting of affiliation to a college within State of Haryana as per prescribed manner; monitoring of academic standards in affiliated colleges for continuation of affiliation. The constituted Affiliation Committee is as under:

#### Chairman

Vice-Chancellor

**Dr. Vinod Kumar Verma**

#### Member-Secretary

Registrar, LUVAS

**Dr. S.S. Dhaka**

#### Members

1. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
2. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)





3. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
4. Director of Research  
**Dr. Naresh Jindal**
5. Director of Extension Education  
**Dr. Manoj Kumar Rose** (upto 15.09.2023)  
**Dr. V.S. Panwar** (15.09.2023 onwards)

### **Resident Instruction Committee (RIC)**

The Resident Instruction Committee is responsible for proposing new courses, curricula, modifications, etc. to Veterinary Sciences, Animal Sciences, Dairy Sciences and Technology of Post graduate studies, rules and regulations. It also reviews the standard of the teaching of students and evaluation post graduate students. RIC is also responsible to recommend intake capacity of different post-graduate programmes and disciplines of the college/ university. The constituted Resident Instruction Committee is as under:

#### **Chairman**

Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**

#### **Member Secretary**

**Dr. Rajesh Khurana**  
Director, Human Resource Management  
Professor, Veterinary Public Health and Epidemiology

#### **Members**

1. Registrar, LUVAS  
**Dr. S.S. Dhaka**

2. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
3. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (Upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)
4. Director, Human Resource Management  
**Dr. S.S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)
5. Director, IPVS  
**Dr. S.P. Dahiya** (Upto 30.04.2024)  
**Dr. Pawan Kumar** (01.05.2024 onwards)
6. Director of Research  
**Dr. Naresh Jindal**
7. Director of Extension Education  
**Dr. Manoj Kumar Rose** (Upto 15.09.2023)  
**Dr. V.S. Panwar** (15.09.2023 onwards)
8. Director Students' Welfare-cum-Estate Officer, LUVAS  
**Dr. D.S. Dalal** (Upto 15.09.2023)  
**Dr. Pawan Kumar** (18.09.2023 onwards)
9. Senior most Professor  
**Dr. S.P. Dahiya** (Upto 30.04.2024)  
**Dr. Y. S. Rana** (01.05.2024 onwards)  
**Dr. Sharanagouda Patil**

#### **Special Invitees**

Secretary, Board of Studies, COVS  
**Dr. Vikash Nehra**  
Head, Department of Veterinary Pathology

## **OTHER IMPORTANT COMMITTEES**

### **Working group for Technology Incubation Centre**

#### **Chairperson**

Director, Human Resource Management  
**Dr. S. S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)

#### **Nodal Officer**

**Dr. Shalini Arora**  
Assistant Professor, CoDST

#### **Members**

1. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
2. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (Upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)
3. Director of Research  
**Dr. Naresh Jindal**





4. **Dr. Tejinder Pal Singh**  
Assistant Professor, Dairy Microbiology, CoDST
5. **Dr. Sushma**  
Assistant Professor, Department of Veterinary Pathology
6. **Dr. Sushil Kumar**  
Assistant Professor, Department of Animal Nutrition
7. **Dr. Pawan Kumar**  
Assistant Professor, Department of Animal Biotechnology
8. **Dr. Monika**  
Assistant Professor, Department of Livestock Products Technology

#### Invitees

- Head of the Department of which technology is to be commercialized
- Concerned Scientist

#### Institutional Innovation Council

##### President

Director, Human Resource Management

**Dr. S. S. Dhaka** (upto 15.09.2023)

**Dr. Rajesh Khurana** (16.09.2023 onwards)

##### Convener

**Dr. Aman Dev Moudgil**

Assistant Professor, Department of Veterinary Parasitology

##### Members

1. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
2. Director of Research  
**Dr. Naresh Jindal**
3. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (Upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)
4. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
5. Director of Extension Education  
**Dr. Manoj Kumar Rose** (Upto 15.09.2023)  
**Dr. V.S. Panwar** (15.09.2023 onwards)

6. **Dr. Tejinder Pal Singh**  
Assistant Professor, College of Dairy Sciences and Technology
7. **Dr. Shalini Sharma**  
Assistant Professor, Department of Veterinary Physiology and Biochemistry
8. **Dr. Gaurav Gupta**  
Assistant Professor, Department of Veterinary Pharmacology and Toxicology
9. **Dr. Priyanka**  
Assistant Professor, Veterinary Surgery and Radiology
10. **Dr. Rachna**  
Assistant Professor, College of Dairy Sciences and Technology
11. **Dr. Vishal Sharma**  
Assistant Professor, Department of Livestock Production Management
12. **Dr. Ramesh Kumar**  
Assistant Professor, Veterinary Public Health and Epidemiology
13. **Dr. Swati Dahiya**  
Scientist, Veterinary Microbiology

#### IPR Management and Commercialization Advisory Board

##### Chairperson

Vice-Chancellor, LUVAS

**Dr. Vinod Kumar Verma**

##### Member Secretary

Director, Human Resource Management

**Dr. S.S. Dhaka** (upto 15.09.2023)

**Dr. Rajesh Khurana** (16.09.2023 onwards)

##### Members

1. Director of Research  
**Dr. Naresh Jindal**
2. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
3. Dean, College of Dairy Sciences and Technology  
**Dr. Naresh Jindal** (upto 15.09.2023)  
**Dr. Sajjan Sihag** (15.09.2023 onwards)





4. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
5. Director, Extension Education  
**Dr. Manoj Kumar Rose** (Upto 15.09.2023)  
**Dr. V.S. Panwar** (15.09.2023 onwards)
6. Registrar  
**Dr. S.S. Dhaka**
7. Comptroller  
**Sh. Surender Kumar**

### Special Invitee

HoD (of the concerned department of which the technology is being commercialized/IPR related issues involved)

### IPR Management and Commercialization Core Group Committee

#### Chairperson

Director, Human Resource Management  
**Dr. S.S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)

#### Member Secretary

**Dr. Renu Gupta**  
Associate Professor, Veterinary Public Health and Epidemiology

#### Members

1. Director of Research  
**Dr. Naresh Jindal**
2. **Dr. Divya Agnihotri**  
Associate Professor, Veterinary Clinical Complex
3. **Dr. Shalini Arora**  
Assistant Professor, Dairy Technology
4. **Dr. Pawan Kumar**  
Assistant Professor, Animal Biotechnology
5. **Dr. Archana Lohiya**  
Assistant Professor, Veterinary Pharmacology and Toxicology
6. **Dr. Satish Jangra**  
Assistant Professor, Dairy Business Management

7. **Dr. Monika**  
Assistant Professor, Livestock Products Technology

### Special Invitees

1. HoD of the concerned department of which the technology is being commercialized/IPR related issue involved
2. Scientist/Inventor (whose technology is being commercialized/IPR related issue)

### MoU Committee

#### Chairperson

Director, Human Resource Management  
**Dr. S.S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)

#### Members

1. Director of Research  
**Dr. Naresh Jindal**
2. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
3. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
4. Director, Extension Education  
**Dr. Manoj Kumar Rose** (Upto 15.09.2023)  
**Dr. V.S. Panwar** (15.09.2023 onwards)
5. Senior most Professor/equivalent  
**Dr. S.P. Dahiya** (Upto 30.04.2024)  
**Dr. Y. S. Rana** (01.05.2024 onwards)
6. Senior most Professor/equivalent  
**Dr. Sharanagouda Patil**

### Post Clearance Committee

#### Chairperson

Director, Human Resource Management  
**Dr. S.S. Dhaka** (Upto 15.09.2023)  
**Dr. Rajesh Khurana** (16.09.2023 onwards)

#### Members

1. Registrar, LUVAS  
**Dr. S.S. Dhaka**





2. Dean, College of Veterinary Sciences  
**Dr. Gulshan Narang**
3. Director of Research  
**Dr. Naresh Jindal**
4. Dean, Post Graduate Studies  
**Dr. Manoj Kumar Rose**
5. Comptroller  
**Sh. Surender Kumar**

#### **Non-statutory Functional Committees**

1. Central Disciplinary Committee
2. Committees for Award of Gold medals
3. Central Purchase Committee
4. Officer's Committee
5. Grievances Redressal Committee
6. Prevention of Sexual Harassment through Gender Sensitization Committee
7. Postgraduate Admission Committee
8. Unfair Means Committee
9. Library Advisory Committee
10. Internal Quality Assurance Cell (IQAC)

#### **College Level Committees**

The university has provided a consistent administrative structure within its constituent colleges i.e., College of Veterinary Sciences and College of Dairy Sciences and Technology. A number of committees function at college level to provide a common platform for management of teaching, research and extension. These committees include:

1. College Project Review Committee
2. College Steering Committee
3. Equivalence Committee
4. Time Table Committee
5. Committee for Extension of Time Limit in Studies
6. College Magazine Committee

#### **Department Level Committees**

Below listed committees oversee the academic functioning at the level of individual departments:

1. Departmental Advisory Committee
2. Student Advisory Committee





## FUNCTIONAL UNITS OF UNIVERSITY

### Controller of Examination

Controller of Examination (COE) is responsible for preparing schedules for internal and external examinations, compilation and declaration of results, conductance of various entrance/recruitment entrance tests, etc. The details of various entrance tests conducted by examination cell are shown in table below:

Sr. No.	Name of the test	Date of Exam.	No. of candidates applied	No. of candidates appeared
1.	Diploma Entrance Test - 2023 for admission to VLDD Programme	14.10.2023	1974	1497
2.	CET - Group C Prelims (of Haryana Govt. as one of the centres)	02.07.2023	280	255
3.	Lower Standard Examination & Higher Standard Examination	Aug. 2023 to Oct. 2023	LSE-47 HSE-71	LSE-39 HSE-55

### Examinations conducted during this period by COE in respect of



Entrance Examinations being conducted by LUVAS

### B.V.Sc. & A.H. Programme

The internal, external and supplementary examinations of 1<sup>st</sup> to 4<sup>th</sup> year B.V.Sc. & A.H students of COVS, LUVAS and

affiliated private colleges/institutes were conducted.

### B.Tech. (D.T.) programme

Mid-term, end term and supplementary examinations





pertaining to 1<sup>st</sup> and 2<sup>nd</sup> semester of the academic year 2023-24 of all the classes of B.Tech. (D.T.) of CoDST were conducted.

### VLDD Programme

The annual and supplementary examinations of VLDD 1<sup>st</sup> and 2<sup>nd</sup> Year students of IPVS and 16 affiliated private colleges/institutes were conducted.

### Store Purchase Organization

Store Purchase Organization is a central purchase agency of the university. The mandate of organization is to help in purchases of the university through rate contracts, tenders and quotations, along with procurement and supply of items of general use through central store. The organization is maintaining and updating mailing lists of reputed manufacturers/dealers and stockiest. The organization finalizes various purchase proposals through Central Purchase Committee (CPC).

The rate contract for the year 2023-24 i.e. upto period ending 30.09.2024 were finalized by the store purchase organization. The following equipments were purchased by the store purchase organization.

#### Sr. No. Name of Equipment

1. RP HPLC
2. Multimode Reader
3. Poly Film for Experimental Dairy Plant
4. Smart Classroom Panel and Video Conferencing unit
5. Computed Radiography System
6. Surgical Ophthalmic Microscope with Accessories
7. Anaesthesia Machine
8. Backhoe Loader (JCB)
9. General, Stationery & Electrical Items

### Press and Media Unit

The Public Relation Office of the University is engaged in disseminating the information of the university related to policies and programmes implemented as well as research achievements of public interest for all the citizens through print and electronic media at regular intervals. The objectives of the PR office are as given below:

- To disseminate information to the public on the policies, programmes and developmental activities of the LUVAS for the welfare of people of the Haryana at large.
- To take the feedback about such developments from all the people and inform the University administration about the same.
- To maintain cordial relation with the media.

In addition, during the period under report, the office of PRO conducted press conferences and disseminated information related to various activities and events of the University.

### Student Counselling and Placement Cell

Student counselling and placement cell has a mandate of guiding the students in overall personality development enabling them to undertake multifarious activities related to animal welfare. Besides this, cell provides opportunities to interact with prospective employers including officers of the State Animal Husbandry department, executive officers of pharmaceuticals industry, dairy industry, meat industry, livestock breeding, insurance and banking sector. This cell has the following aims and achievements:

- Undergraduate and postgraduate students are provided counselling for education, higher studies, emotional, personality development, facing interviews and other needs for their careers in various fields.
- Updating of students about new jobs through e-mails, phones and notices.
- Acting as facilitator for contact of LUVAS graduates with various employers. Many companies, government institutes, government animal farms, private dairy farms, NGO's and feed companies are contacted for placement of students.

Graduates passing out from Lala Lajpat Rai University of Veterinary and Animal Science (LUVAS), Hisar mostly find employment across all parts of the globe in different types of organizations viz., State Government Organizations, GOI organizations, Private Organizations, Universities, Institutes of repute for higher education (both in India and abroad).

Out of 323 placements in the year 2023-24, maximum were in Department of Animal Husbandry and Dairying (261).





Fifteen (15) graduates were placed in armed forces (12 in BSF and 03 in Remount Veterinary Corps). Graduates are regularly posted at prestigious institutes like ASRB, FSSAI, Central Silk board, State Agricultural Universities etc. Among private organizations, private pet hospitals (Tailsway, Vetic) are top recruiters.

During the year 2023-2024, majority of the fresh graduates opted for higher studies i.e., M.V.Sc in LUVAS and other veterinary colleges by getting ICAR Junior Research Fellowship and other students got placement. During the year 2023-24, following students got the placement:

**List of students joined Armed Forces, Govt. of India (Border Security Force and Remount Veterinary Corps)**

S.No.	Name	S.No.	Name
1.	Dr. Abhey Singh	9.	Dr. Ritu Yadav
2.	Dr. Avinash	10.	Dr. Sharmila Devi
3.	Dr. Kanika	11.	Dr. Vikas Kumar
4.	Dr. Naveen Kumar Joshi	12.	Dr. Deepika
5.	Dr. Pradeep	13.	Dr. Kiran Kumar
6.	Dr. Priyanka	14.	Dr. Mukul Lohan
7.	Dr. Rashmi Sharma	15.	Dr. Vivek Jangra
8.	Dr. Ravinder		

**List of students joined Central Institutes, State Agricultural Universities and other state government organizations**

S.No.	Name	Designation and organization
1.	Dr. Jigyasha	Central Silk Board
2.	Dr. Oshin	Central Silk Board
3.	Dr. Amit Kumar	Assistant Professor, GADVASU, Punjab
4.	Dr. Jadhav Mayuri Nitin	Department Of Animal Husbandry, Govt. of Maharashtra
5.	Dr. Upender	FSSAI, MoH&FW, Govt. Of India.
6.	Dr. Anju Poonia	Assistant Professor, GADVASU, Punjab
7.	Dr. Ansu Kumari	Assistant Professor, GADVASU, Punjab
8.	Dr. Dipti	Assistant Professor, GADVASU, Punjab
9.	Dr. Tanvika Sangwan	Assistant Professor, GADVASU, Punjab
10.	Dr. Vinay Yadav	Assistant Professor, GADVASU, Punjab
11.	Dr. Komal	Krishi Vigyan Kendra, Mohali
12.	Mr. Devender Singh	Lecturer in UP Technical Education (Dairy Engineering)
13.	Mr. Rahul Kumar	Lecturer in UP Technical Education (Dairy Engineering)
14.	Dr. Vaishali	Assistant Professor, Rajasthan University of Veterinary and Animal Sciences, Bikaner, Raj.
15.	Dr. Piyush Tomar	Assistant Professor, Sardar Vallabhbhai Patel University of Agriculture and Technology
16.	Dr. Garima Kansal	SMS, LPM, ASRB
17.	Dr. Rishipal	STO, ARGO, ASRB
18.	Dr. Diksha Bhardwaj	STO, Dairy Chemistry, ASRB
19.	Dr. Narayani Yadav	STO, Medicine, ASRB
20.	Dr. Anju Bala	Veterinary officer, Punjab government





### List of students joined as Veterinary Surgeon in Haryana

S.No.	Name of the Alumni	S.No.	Name of the Alumni	S.No.	Name of the Alumni
1.	Dr. Aamir Khan	37.	Dr. Ayusha	73.	Dr. Konika
2.	Dr. Aashish Chahal	38.	Dr. Bhawana	74.	Dr. Krishan Kumar
3.	Dr. Abhishek Soni	39.	Dr. Bhumika	75.	Dr. Kushal Grakh
4.	Dr. Ajay Kumar	40.	Dr. Bijender	76.	Dr. Lalit
5.	Dr. Ajay Pal	41.	Dr. Bijender Singh	77.	Dr. Lalit Kumar
6.	Dr. Ajit Verma	42.	Dr. Chetan Jajoria	78.	Dr. Lalita Garg
7.	Dr. Akashdeep	43.	Dr. Chirag Pruthi	79.	Dr. Lohit Sharma
8.	Dr. Akashdeep Indora	44.	Dr. Deepak	80.	Dr. Mahender Singh
9.	Dr. Aman Deep Kaur	45.	Dr. Deepak	81.	Dr. Manbeer Singh
10.	Dr. Amandeep	46.	Dr. Deepak	82.	Dr. Manikant
11.	Dr. Ambika Kumari	47.	Dr. Deepak	83.	Dr. Manish
12.	Dr. Amit	48.	Dr. Deepak Chopra	84.	Dr. Manish Yadav
13.	Dr. Amit Kumar	49.	Dr. Deepak Soni	85.	Dr. Manisha Yadav
14.	Dr. Amit Kumar	50.	Dr. Deepanshu	86.	Dr. Manita Dangi
15.	Dr. Amit Kumar	51.	Dr. Deepika Kataria	87.	Dr. Meetu
16.	Dr. Amit Kumar	52.	Dr. Deepika Kumari	88.	Dr. Monika
17.	Dr. Anamika	53.	Dr. Devika	89.	Dr. Monika Jalwan
18.	Dr. Anil Kumar	54.	Dr. Diksha Panwar	90.	Dr. Monika Rani
19.	Dr. Anil Kumar	55.	Dr. Dinesh Chahal	91.	Dr. Mukesh
20.	Dr. Anil Kumar	56.	Dr. Ekta Rani	92.	Dr. Mukesh Kumar
21.	Dr. Anjana Kumari	57.	Dr. Garima	93.	Dr. Mukesh Kumari
22.	Dr. Anju Bala	58.	Dr. Garima Kansal	94.	Dr. Mukesh Kumari
23.	Dr. Anju Rohilla	59.	Dr. Gaurav Dixit	95.	Dr. Muninder Khatana
24.	Dr. Ankit Dahiya	60.	Dr. Geetanjali	96.	Dr. Munish
25.	Dr. Ankit Dangi	61.	Dr. Gourav Saini	97.	Dr. Narayani Yadav
26.	Dr. Anshul Kamboj	62.	Dr. Harendra Singh	98.	Dr. Natasha Yadav
27.	Dr. Anu Malik	63.	Dr. Hariom	99.	Dr. Naveen
28.	Dr. Anup Yadav	64.	Dr. Isha	100.	Dr. Naveen
29.	Dr. Anupama	65.	Dr. Joney	101.	Dr. Naveen
30.	Dr. Arju	66.	Dr. Kamal	102.	Dr. Naveen Kumar
31.	Dr. Arun Bansal	67.	Dr. Kamal Kumar	103.	Dr. Naveen Kumar
32.	Dr. Arun Sheokand	68.	Dr. Karan Sharma	104.	Dr. Naveen Kumar
33.	Dr. Ashish	69.	Dr. Karmjeet Singh	105.	Dr. Naveen Kumar
34.	Dr. Ashish	70.	Dr. Kavita	106.	Dr. Naveen Kumar Joshi
35.	Dr. Ashish Ahlawat	71.	Dr. Kirti	107.	Dr. Neeraj Sharma
36.	Dr. Ashish Kumar	72.	Dr. Komal	108.	Dr. Neetu Nehra





109.	Dr. Neha	147.	Dr. Ravinder	185.	Dr. Shweta Valecha
110.	Dr. Neha	148.	Dr. Ravinder Yadav	186.	Dr. Simran Kamboj
111.	Dr. Nisha	149.	Dr. Ravish	187.	Dr. Simran Kaur
112.	Dr. Nitesh	150.	Dr. Reetu Rani	188.	Dr. Sonika Birla
113.	Dr. Pardeep Kumar	151.	Dr. Renuka	189.	Dr. Sonu
114.	Dr. Parvinder	152.	Dr. Resu Devi	190.	Dr. Sonu
115.	Dr. Pawan Kumar	153.	Dr. Rinku	191.	Dr. Sourbh Arya
116.	Dr. Pooja	154.	Dr. Rishipal	192.	Dr. Sudhir Mehra
117.	Dr. Pooja	155.	Dr. Ritu	193.	Dr. Sujata
118.	Dr. Pooja Yadav	156.	Dr. Ritu	194.	Dr. Sujata
119.	Dr. Pooja Yadav	157.	Dr. Rohit	195.	Dr. Sukhbir Ravish
120.	Dr. Poonam	158.	Dr. Rohit	196.	Dr. Sulekha
121.	Dr. Pradeep	159.	Dr. Rohit	197.	Dr. Sunil Dutt
122.	Dr. Pradeep Kumar	160.	Dr. Rohit Kumar	198.	Dr. Sunil Kumar
123.	Dr. Pradeep Singh	161.	Dr. Rohit Sharma	199.	Dr. Sunil Lakra
124.	Dr. Pramod Kumar	162.	Dr. Rohit Yadav	200.	Dr. Surender Punia
125.	Dr. Praveen	163.	Dr. Sachin	201.	Dr. Surjeet Singh
126.	Dr. Praveen Kumar	164.	Dr. Sahil	202.	Dr. Sweety
127.	Dr. Pravesh Khatkar	165.	Dr. Sahil Kumar	203.	Dr. Tarun
128.	Dr. Preetam	166.	Dr. Sajid Hussain	204.	Dr. Tejaswi
129.	Dr. Preeti	167.	Dr. Sanchi Kamal	205.	Dr. Tejwanti Yadav
130.	Dr. Preeti	168.	Dr. Sandeep	206.	Dr. Tushar Jain
131.	Dr. Preeti	169.	Dr. Sandeep	207.	Dr. Umesh Sharma
132.	Dr. Preeti Chaudhary	170.	Dr. Sandeep Kumar	208.	Dr. Upender
133.	Dr. Preety	171.	Dr. Sandeep Kumar	209.	Dr. Vaibhav Bhardwaj
134.	Dr. Priyanka Yadav	172.	Dr. Sandeep Kumar	210.	Dr. Vijay
135.	Dr. Pushpa	173.	Dr. Sandeep Kumar Balodiya	211.	Dr. Vijaypal Yadav
136.	Dr. Radha Bai	174.	Dr. Sandeep Yadav	212.	Dr. Vikas
137.	Dr. Rahul	175.	Dr. Sanjay Balhra	213.	Dr. Vikas
138.	Dr. Rahul	176.	Dr. Sapna Nimbal	214.	Dr. Vikas Sindhu
139.	Dr. Rajan Papneja	177.	Dr. Sarin Kamboj	215.	Dr. Vikash
140.	Dr. Rajan Paylot	178.	Dr. Satish Kumar	216.	Dr. Vikash Rathi
141.	Dr. Rajnesh	179.	Dr. Satya	217.	Dr. Vikram
142.	Dr. Rakesh Kumar	180.	Dr. Sawan	218.	Dr. Vikram
143.	Dr. Ramandeep Kaur	181.	Dr. Shabnam	219.	Dr. Vilshan
144.	Dr. Randeep	182.	Dr. Shekhawat Ali	220.	Dr. Vinay
145.	Dr. Ravina	183.	Dr. Shivansh Mehra	221.	Dr. Vinay Kumar
146.	Dr. Ravina Choudhary	184.	Dr. Shweta	222.	Dr. Vinod





223.	Dr. Vinod Adhana	229.	Dr. Yogesh	235.	Dr. Manish Kumar
224.	Dr. Vipin	230.	Dr. Yogesh	236.	Dr. Manoj
225.	Dr. Viraj	231.	Dr. Amit	237.	Dr. Mohit Kumar
226.	Dr. Vishal	232.	Dr. Gunjan	238.	Dr. Praveen Kumar
227.	Dr. Vishal	233.	Dr. Harish	239.	Dr. Ravinder
228.	Dr. Vishal Kumar	234.	Dr. Jigyasha		

### List of students joined private sector

S.No.	Name	Organization
1.	Dr. Aman	Veterinary Consultant in Ambulatory services
2.	Dr. Annu Yadav	Assistant Professor, IIVER-Rohtak
3.	Dr. Dinesh Chahal	Veterinary Consultant, Bavya Health Services Pvt Ltd (Mobile Veterinary Unit Services)
4.	Mr. Ajay	Gujarat Co-operative Milk Marketing Federation Ltd. (Amul)
5.	Dr. Ankit Kumar	Max Vets, Pet Hospital Greater Kailash, New Delhi
6.	Dr. Savita Machra	Pet Chikitsa Multispeciality Hospital, Gurugram, Haryana
7.	Mr. Yashpal	Punjab Dairy Development Board
8.	Dr. Rahul	Private Clinic
9.	Dr. Jatin Berwal	Private Practice
10.	Dr. Naresh	Private Practice
11.	Dr. Priyanka	Private Practice
12.	Dr. Rajat Kumar	Private Practice
13.	Dr. Vishal Dhillon	Private Practice
14.	Dr. Devankit Narwal	Tailsway, Delhi
15.	Dr. Karamvir	Tailsway, Delhi
16.	Dr. Karan Singh	Tailsway, Delhi
17.	Dr. Lakshay	Tailsway, Delhi
18.	Dr. Rohit Bambel	Tailsway, Delhi
19.	Dr. Sukhbir	Tailsway, Delhi
20.	Dr. Ravi Kothari	Vetic, Gurugram, Haryana
21.	Dr. Sahil Behal	Vetic, Gurugram, Haryana
22.	Dr. Sanjay Sharma	Vetic, Gurugram, Haryana
23.	Dr. Suhaas Tikoo	Vetic, Gurugram, Haryana





## List of students placed abroad for employment/higher studies

S.No.	Name	Designation and organization
1.	Dr. Ashish Kumar	Vinay Singh Bhadaria, Verdun, Mauritius
2.	Dr. Abhishek Chauhan	Commonwealth, UK
3.	Dr. Ravi Gupta	South Dakota State University, USA
4.	Dr. Dharanya Muthiah	Oklahoma State University, USA
5.	Dr. Sakshi Pandita	University of Georgia, USA

## Activities organized by ADSW (C&P)

### 1. Organization of National Student Paryavaran Competition (NSPC 2023)

National Student Paryavaran Competition (NSPC 2023) was held at the EcoMitram app from July 1, 2023 to August 21, 2023 for which Dr. Renu Gupta, ADSW (Counselling and Placement) was nominated as Nodal Officer (ENO). A total of 116 students from College of Veterinary Sciences and College of Dairy Sciences and Technology participated in the competition.

### 2. Celebration of World Entrepreneurs' Day on August 21, 2023

Counselling and Placement Cell, Directorate of Students' Welfare organized a talk by two young successful entrepreneurs Dr. Parmod Kumar, Pet Chikitsa Multispeciality Hospital, Gurugram, Haryana and Dr. Pooja Kundu, First Choice Vet Diagnostic Center, Near JIET college, Safidon Road, Jind, who are also alumni of Lala Lajpat Rai University of Veterinary and Animals Sciences. A total of 78 students participated in the event.

### 3. Talk by Dr. Deepak Kumar, on NAVLE and DVM Licensing Exams on October 25, 2023

Placement and Counselling Cell, Directorate of Student's Welfare organized an interactive talk by Dr. Deepak Kumar, Emergency veterinarian at Blue Pearl Vet Specialty and Emergency Center in California, USA. Dr. Deepak Kumar, an accomplished alumnus of the College of Veterinary Sciences, LUVAS Hisar, delivered a motivating and enlightening talk on the intricacies of



Lecture delivered on 'World Entrepreneurship Day'



Talk delivered on NAVLE and DVM Licensing Exams preparation and passing the critical licensing exams like National Veterinary Licensing Examination (NAVLE) and Doctor of Veterinary Medicine (DVM). He provided valuable tips and strategies for successfully preparing and passing these rigorous tests. Dr. Kumar shed light on the myriad career opportunities available to veterinary graduates and postgraduates. He discussed the evolving landscape of veterinary medicine in the United States and how aspiring veterinarians can find their niche.

## Library

### Activity/Achievements:

- LUVAS library book shop procured and distributed 67 books of ₹ 2,20,000/- at discounted price for different faculties and departments of the University.
- A total of 347 books worth ₹ 2,24,987/- were purchased for the benefit of SC students of the





University.

- Library has also made the e-books, e-journals, and CeRA facility accessible to the faculty, researchers and students of LUVAS through 40 computers in the computer lab of the University.
- Library has uploaded 94 M.V.Sc. & 43 Ph.D. theses of students of LUVAS on Krishi-Kosh (a repository of ICAR).
- Library is the nodal office for providing “Plagiarism checking software” to all students and faculty of LUVAS.

### All India Survey of Higher Education (AISHE)

LUVAS has an All India Survey of Higher Education (AISHE) Cell. The four member AISHE cell was created vide Order No. Reg/A-1/2023/5082 dated 13.6.2023 as under:

1. Dr. Sandeep Kumar, Assistant Professor, Veterinary Gynaecology and Obstetrics (Nodal Officer)
2. Dr. Monika, Assistant Professor, Livestock Products Technology (Member)
3. Dr. Nancy Sheoran, Assistant Professor, Animal



Nutrition (Member)

4. Dr. Sandeep, Assistant Professor, Livestock Production Management (Member)

The AISHE Code of the University is U-0165. The AISHE cell collects data from the University departments on a number of parameters such as teachers, student enrolment, programmes, examination results, education, finance and infrastructure etc. In addition, the cell also manages the status of affiliated colleges of LUVAS on the AISHE portal. For this purpose, the necessary correspondence and guidance has been provided to all the affiliated colleges of the university. The information is uploaded on the AISHE web-portal (<https://aishe.gov.in/aishe/home>) managed by the Ministry of Human Resource Development. During the report period, the AISHE information was collected, compiled and uploaded for the survey year 2022-23 on 18.3.2024 with a reference date of December 31, 2022. In general, the uploaded information builds a database to access the correct picture of higher education in the country.

### Website Management

The university website “[www.luvas.edu.in](http://www.luvas.edu.in)” is operational since November 2010. The various contents viz. faculty profiles, university circulars, notices, various forms, announcements, tenders, quotations etc. are uploaded regularly on daily basis and updated every day of the year. University website is routinely accessed by faculty, students, farmers, citizens and other visitors to obtain requisite information. The website is playing an important role in disseminating the information pertaining to various activities like admission in various degrees and diplomas of university, recruitments, trainings, camps, disease prevention etc. Dr. Dinesh Mittal, Associate Professor, Department of Veterinary Public Health and Epidemiology is looking after day-to-day management of University website under the guidance of Dean, COVS-cum-Chairman, University Website Management Committee, LUVAS, Hisar. The other members of website management committee include: Dr. Sumit Mahajan, Assistant Professor, Dairy Business Management; Dr. Poonam Ratwan, Scientist, Animal Genetics and Breeding; Dr. Preeti Bagri, Scientist,





Veterinary Pharmacology and Toxicology; Dr. Sneh Lata Chauhan, Scientist, Veterinary Clinical Complex and Dr. Gaurav Charaya, Assistant Professor, Veterinary Medicine. The website has SSL certification security being hosted using high-speed server. During the period under report, routine major and minor updates were made on university website covering announcement displays, admission notices, recruitment notices, tenders, quotations and other important circulars. Website management committee designed a new website for LUVAS that was launched by worthy Vice Chancellor Prof. Dr. Vinod Kumar Verma on 03.07.2023. Updated website was designed to make it more informative and to provide better navigation experience for end users. The website is more student and farmer centric with new features like kisan seva, students

corner, services at LUVAS for farmers, students and other citizens. Kisan seva includes important monthly information for management of animals, disease investigation laboratories, information regarding various diseases, advanced vigyan kendra, trainings provided by LUVAS, App- download for farmers, SMS services and farmers contact helpline number for information. Students are benefitted with availability of important academics information like academic calendar, timetable, examination schedule etc. in student corner. New tabs like university achievement and placement and entrepreneurship have been introduced for university achievements in all fields on website. Another feature i.e. events @LUVAS has also been introduced to disseminate the information regarding various events organized at LUVAS.

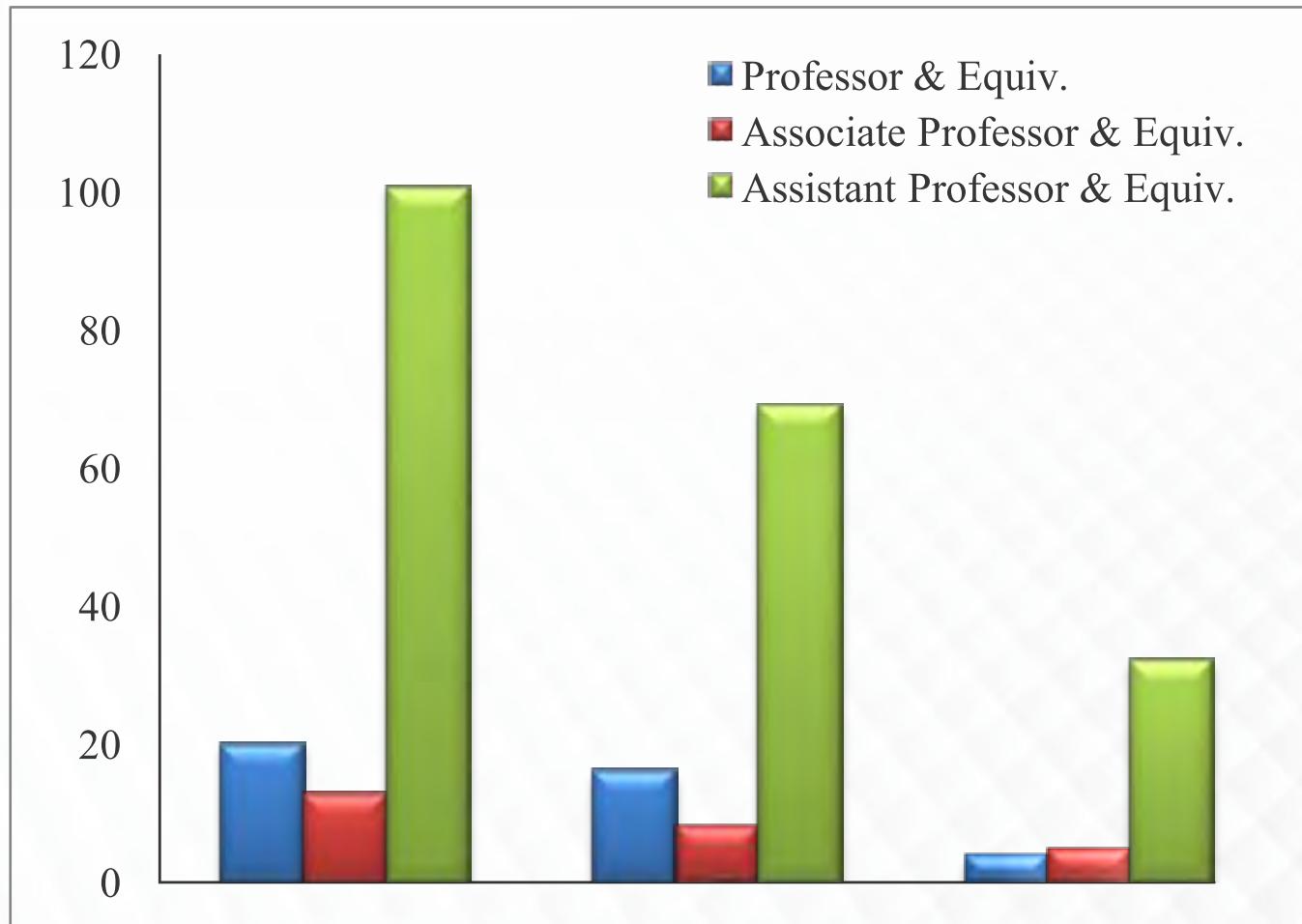




# CLASSIFICATION OF UNIVERSITY EMPLOYEES

## Faculty Classification

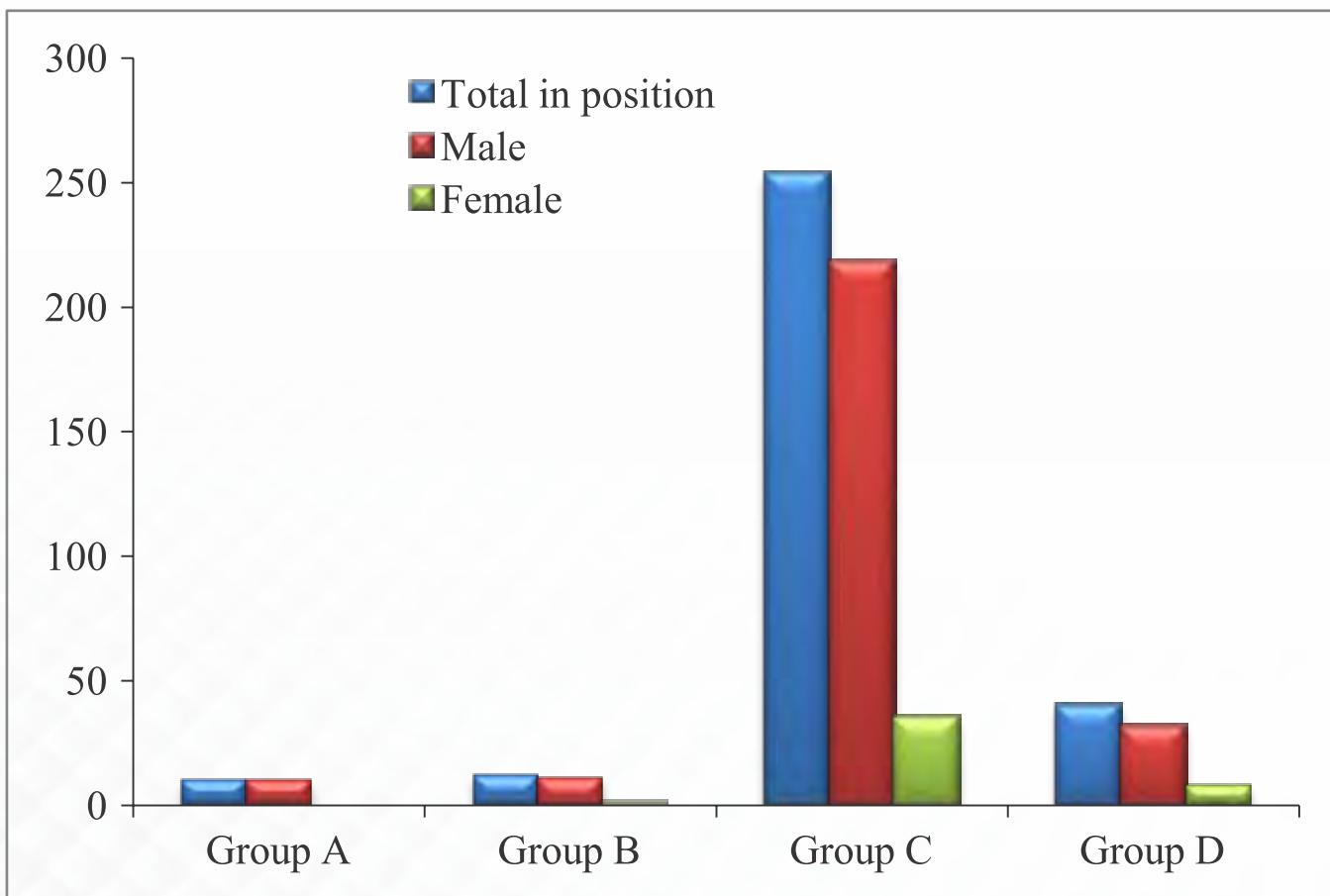
Designation	Total in position	Male	Female
Vice-Chancellor	1	1	-
Deans/Directors	4	4	-
Professor & Equiv.	20	16	4
Associate Professor & Equiv.	13	8	5
Assistant Professor & Equiv.	101	69	32
<b>Total</b>	<b>139</b>	<b>98</b>	<b>41</b>





## Supporting Staff Classification

Category	Total in position	Male	Female
Group A	10	10	0
Group B	12	11	1
Group C	253	218	35
Group D	40	32	8
<b>Total</b>	<b>315</b>	<b>271</b>	<b>44</b>

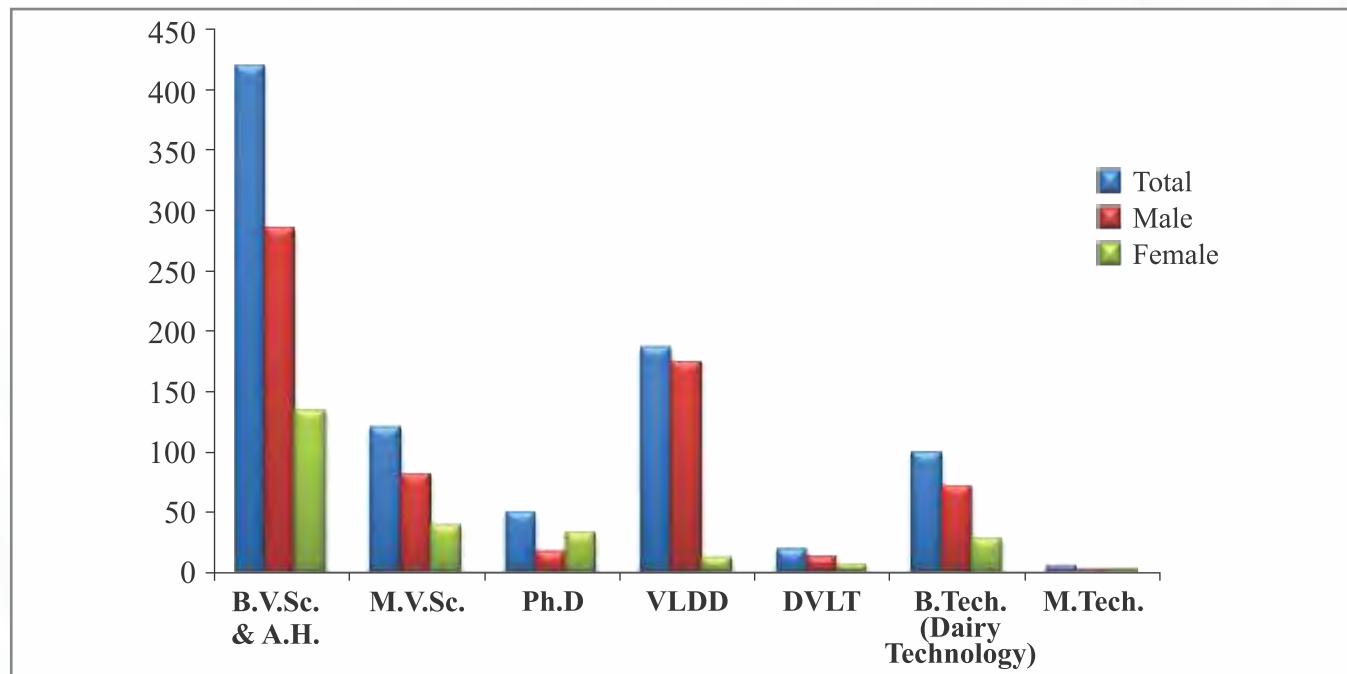




## STUDENT ENROLMENT

Category	Total in position	Male	Female
<b>College of Veterinary Sciences, LUVAS</b>			
B.V.Sc. & A.H.	419	285	134
M.V.Sc.	120	81	39
Ph.D	50	17	33
VLDD	186	174	12
DVLT	19	13	06
<b>College of Dairy Science and Technology, LUVAS</b>			
B. Tech. (Dairy Technology)	99	71	28
M. Tech.	05	02	03
<b>Total</b>	<b>898</b>	<b>643</b>	<b>255</b>
<b>Colleges Affiliated to LUVAS</b>			
B.V.Sc. & A.H.	1262	1008	254
VLDD	1097	1031	66
<b>Grand Total</b>	<b>3257</b>	<b>2682</b>	<b>575</b>

### Student Enrolment in LUVAS, Hisar





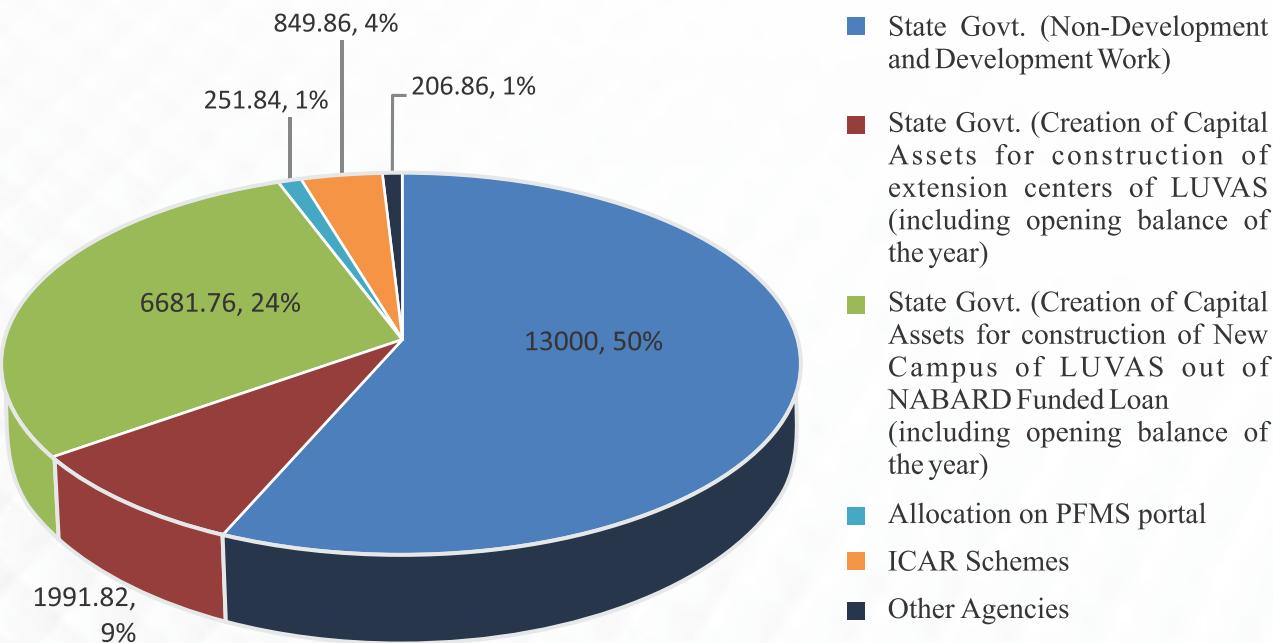
## REVENUE AND EXPENDITURE

University Budget Outlay (01.04.2023 to 31.03.2024)

### Budget Receipt and Source of Funding

Sr. No.	Funding agency	Amount (₹ in Lakhs)
1.	State Govt. (Non-Development and Development Work)	13000.00
2.	State Govt. (Creation of Capital Assets for construction of extension centres of LUVAS (Including opening balance of the year)	1991.82
3.	State Govt. (Creation of Capital Assets for construction of New Campus of LUVAS out of NABARD Funded Loan (including opening balance of the year)	6681.76
4.	Allocation on PFMS portal	251.84
5.	ICAR Schemes	849.86
6.	Other Agencies	206.86
	<b>Total</b>	<b>22982.14</b>

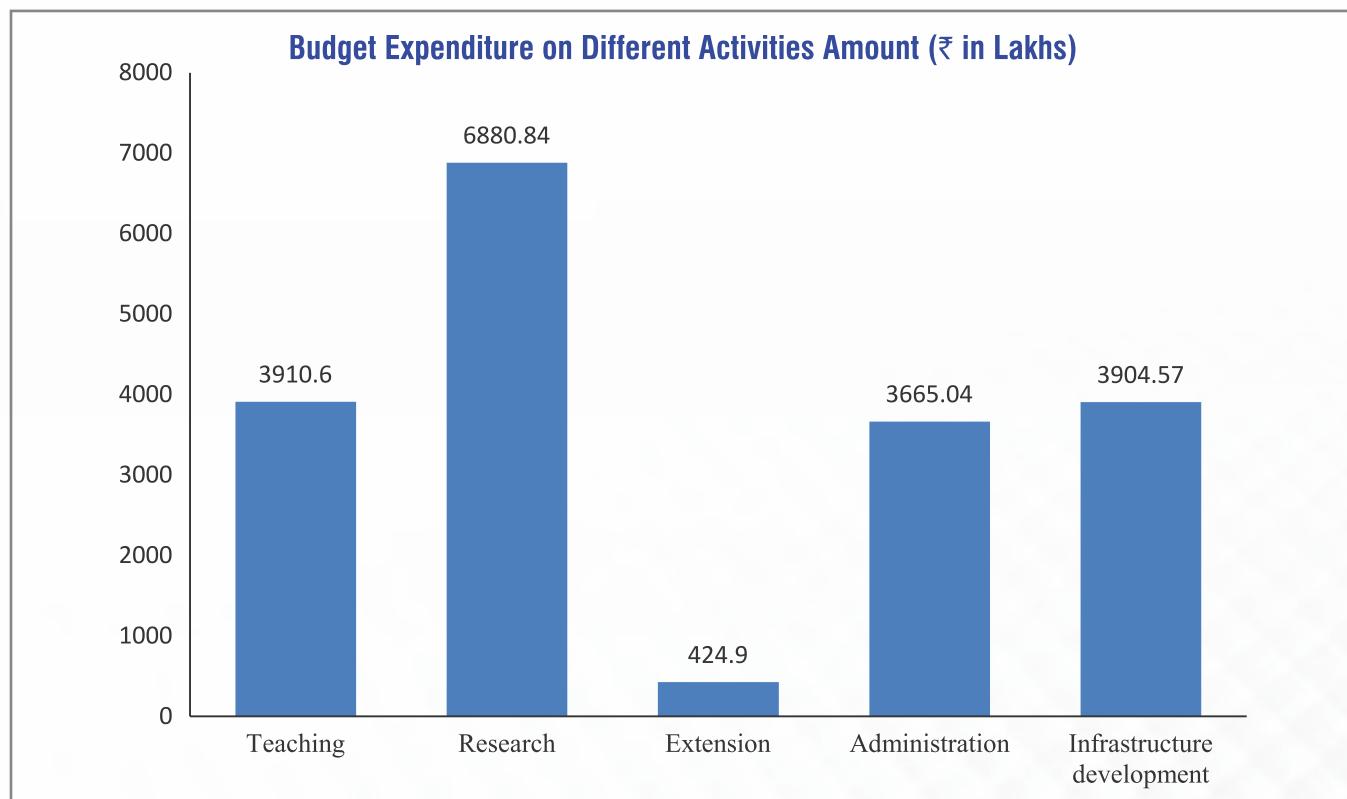
### Amount (₹ in Lakhs)





**Budget Expenditure on Different Activities including Expenditure on Outside Funded Schemes  
(01.04.2023 to 31.03.2024)**

Purpose	Amount (Rs. in Lakhs)
Teaching	3910.60
Research	6880.84
Extension	424.90
Administration	3665.04
Infrastructure development	3904.57
<b>Total</b>	<b>18785.95</b>



**Profile of Employees Superannuated During the Year (01.07.2023 to 30.06.2024)**

Category	Male	Female
Faculty Members	08	01
Ministerial Staff	01	01
Supporting Non -Teaching Staff (Grade A, B, C)	08	02
Grade D/Class IV staff	09	0



**List of Employees Superannuated During the Year (01.07.2023 to 30.06.2024)**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Department/Office</b>	<b>Date of Superannuation</b>
1.	Dr. Trilok Nanda	Professor	Animal Biotechnology	31.07.2023
2.	Smt. Parmeshwari Devi	Lab Technician	Veterinary Microbiology	31.07.2023
3.	Dr. Vinod Kumar Verma	Principal Scientist	Veterinary Pharmacology and Toxicology	31.07.2023
4.	Dr. (Mrs.) Nirmal Sangwan	Professor	Veterinary Physiology and Biochemistry	31.08.2023
5.	Sh. Dharam Pal	Security Guard	Dean COVS	31.08.2023
6.	Dr. Devender Singh Dalal	DSW-cum-EO	Animal Genetics and Breeding	15.09.2023
7.	Sh. Puran Bahadur	Lab. Technician	Veterinary Microbiology	30.09.2023
8.	Sh. Balbir Singh	Animal Attendant	Veterinary Physiology and Biochemistry	30.09.2023
9.	Sh. Sunil Kansal	Lab Technician	Veterinary Public Health and Epidemiology	31.10.2023
10.	Dr. Zile Singh Sihag	Principal Scientist	Animal Nutrition	31.10.2023
11.	Sh. Surender Kumar	Beldar	Livestock Production Management	31.10.2023
12.	Sh. Ram Saroop	Animal Attendant	Livestock Products Technology	31.12.2023
13.	Sh. Ram Niwas	Animal Attendant	Livestock Products Technology	31.12.2023
14.	Sh. Mahabir Singh	Water Pump Operator	Animal Nutrition	31.12.2023
15.	Sh. Rama Shankar	Animal Attendant	Animal Genetics and Breeding	31.12.2023
16.	Dr. Zile Singh Malik	Principal Scientist	Animal Genetics and Breeding	31.12.2023
17.	Sh. Surinder Kumar	VLDA	Animal Genetics and Breeding	31.01.2024
18.	Smt. Shashi Bala	Lab Technician	Animal Nutrition	29.02.2024
19.	Sh. Desh Raj	VLDA	Livestock Products Technology	29.02.2024
20.	Dr. Narender Singh Maan	Principal Scientist	Animal Nutrition	31.03.2024
21.	Sh. Prem Singh	Lab Tech.	Disease Free Small Animal House	30.04.2024
22.	Dr. Bachchu Singh Tewatia	Principal Scientist	Animal Nutrition	30.04.2024
23.	Dr. Satpal Dahiya	Professor	Animal Genetics and Breeding	30.04.2024
24.	Sh. Prabhu Ram	Distributor	Animal Genetics and Breeding	30.04.2024
25.	Smt. Savita Mitra	Personal Assistant	Director of Research	31.05.2024
26.	Sh. Ram Kumar	VLDA	Livestock Production Management	31.05.2024
27.	Sh. Subhash Chander	VLDA	Animal Genetics and Breeding	31.05.2024
28.	Sh. Nanda Ballabh	Security Guard	Dean COVS	31.05.2024
29.	Sh. Subhash Ranga	Dy. Supdt.	Dean COVS	31.05.2024
30.	Sh. Karamvir Singh	Beldar	Veterinary and Animal Husbandry Extension Education	30.06.2024





## ACADEMICS

9

Lala Lajpat Rai University of Veterinary and Animal Sciences conducts programmes leading to the award of degrees of B.V.Sc. and A.H., B.Tech. M.V.Sc., M.Tech. and Ph.D. The University also has an Institute of Para Veterinary Sciences that offers diploma courses, namely, Veterinary Livestock Development Diploma (VLDD) and Diploma in Veterinary Laboratory Technology (DVLT). The admissions to the graduate degree and diploma programmes are through entrance examination, which witness tough competition. The university has internationally recognized faculty, modern infrastructure and world class laboratory facilities to impart quality graduate and postgraduate education in the fields of Veterinary and Animal sciences as well as Dairy Science and Technology. College of Veterinary Sciences is duly recognized by the Veterinary Council of India. The Veterinary Clinical Complex (VCC) of the college is well equipped with modern infrastructure and facilities for diagnosis, treatment and care of sick animals round the clock. VCC serves as a referral Veterinary Hospital for Haryana as well as the neighbouring states including Rajasthan, Punjab and Delhi. It also runs an Ambulatory Clinic which provides treatment to the animals in the nearby adopted villages. Small animal clinic and ophthalmology unit, digital X-ray, ultrasound and coloured Doppler system are some of the unique facilities available in VCC. A large number of animals are brought to VCC daily, which facilitates imparting practical clinical training to the students.

### Teaching Activities

	College of Veterinary Sciences	College of Dairy Science and Technology	Institute of Para Veterinary Sciences
<b>Bachelor's Degree</b>	B.V.Sc. & A.H.	B. Tech.	-
<b>P.G. &amp; Ph.D</b>	M.V.Sc., Ph.D.	M. Tech.	-
<b>Diploma courses</b>	-	-	VLDD, DVLT

### Seminars Held

Type of seminar	Number
Credit seminars	52
Synopsis seminars	41
Thesis seminars	43
Students departmental seminars	6
Any other seminars	8



**M.V.Sc. Degree Completed**

<b>Sr. No.</b>	<b>Subject</b>	<b>Name of Student</b>	<b>Name of Major Advisor</b>	<b>Title of Thesis</b>
1.	Animal Biotechnology	Jatin	Dr. Joshi Vinay Ganeshrao	“Indirect peptide-based ELISA for detection of antibodies against Infectious Bursal Disease virus”.
2.	Animal Genetics and Breeding	Muninder Khatana	Dr. C. S. Patil	“Genetic evaluation of test day milk records and conformation traits in Hardhenu cattle.”
3.		Spandan Shashwat Dash	Dr. Y.C. Banger	“Genetic evaluation of performance traits in Harnali sheep using Bayesian inference”.
4.		Naveen Kumar Sheoran	Dr. Poonam Ratwan	“Identification of polymorphisms in OLR1 and SCD1 genes and their association with performance traits in Murrah buffaloes.”
5.		Rohit Solanki	Dr. S.S. Dhaka	“Study on genetic variants of IGFBP2 and IGFBP3 genes in relation to economic traits in Large White Yorkshire pigs.”
6.		Mohit Singh	Dr. Manoj Kumar	“Association of EGF and AHR gene polymorphisms with economic traits in Large White Yorkshire pigs.”
7.		Ashish	Dr. Man Singh	“Infrared thermography as a non invasive tool to detect udder health in <i>Capra hircus</i> .”
8.	Livestock Production Management	Neha Sisodia	Dr. Dipin Chander Yadav	“Effect of Cotton seed feeding on the performance of Murrah buffaloes.”
9.		Jyotsana Rathore	Dr. Monika Rani	“Development of ice-cream incorporated with <i>Spirulina platensis</i> and inulin.”
10.		Anmol	Dr. Rekha Dahiya	“Production of flaxseeds enriched fermented milk beverage (lassi and buttermilk) as a functional food.”
11.	Veterinary and Animal Husbandry Extension Education	Bhumika	Dr. Sarita	“Pet owner’s ethical orientation and attitude towards animals and their welfare in Haryana.”
12.		Pradeep Kumar	Dr. Gautam	“A Study on Ethical Orientation of Animal Scientists and Veterinarians towards Animal Welfare.”
13.	Veterinary Immunology	Tejaswi	Dr. Akhil Kumar Gupta	“Development of an indirect ELISA and study of immune response to <i>Clostridium chauvoei</i> in cattle.”
14.	Veterinary Medicine	Ravina Choudhary	Dr. Yudhbir Singh	“Studies on diagnosis, therapeutics and molecular characterization of <i>Anaplasma</i> species in cattle.”





Sr. No.	Subject	Name of Student	Name of Major Advisor	Title of Thesis
15.		Shivika Gupta	Dr. Rajendra Yadav	“Survey of blood types in different breeds of dog population in Haryana and therapeutic evaluation of packed RBCs transfusion in anaemic dogs.”
16.		Devashish Srivastava	Dr. Gaurav Charaya	“Studies on species diversity and development of Real Time PCR assay for diagnosis of trypanosomiasis in buffaloes.”
17.	Veterinary Microbiology	Aman Deep Kaur	Dr. Anshul Lather	“Sero-surveillance, sero-monitoring and kinetics of humoral immune response against Foot-and-Mouth Disease virus in goats.”
18.		Ankit Pannu	Dr. Swati Dahiya	“Detection and molecular characterization of foot and mouth disease virus from persistently infected bovine.”
19.		Puneet Singh	Dr. Pankaj Kumar	“Molecular detection and characterization of bovine viral diarrhoea virus from cattle and buffaloes of Haryana.”
20.	Veterinary Pathology	Ashmita Chahal	Dr. Vikas Nehra	“Pathobiological and Immunological studies on monocrotophos intoxicated broiler chicken fed on Curcumin supplemented feed”.
21.		Neetu Nehra	Dr. Deepika	“Studies on the ameliorating effect of eugenol (clove essential oil) on aflatoxicosis in broiler chicken.”
22.		Jadhav Mayuri Nitin	Dr. Chandratre Gauri Arvind	“Toxicopathological investigation on doxorubicin induced cardiotoxicity and genotoxicity in Swiss albino mice and its amelioration by eugenol”.
23.	Veterinary Pharmacology and Toxicology	Vipin	Dr. Preeti Bagri	“Studies on ameliorative potentials of quercetin nanoparticles against subacute toxicity of imidacloprid with special reference to genotoxicity in Swiss albino mice.”
24.		Kajal Bhardwaj	Dr. Vinay Kant	“Synthesis of morin loaded nano-formulations and their dynamic studies with special reference to wound healing potential in rats.”
25.	Veterinary Physiology	Amit Saini	Dr. Rajesh Kumar	“Effect of monochromatic LED lights on physiological performance of broiler chicken.”
26.	Veterinary Public Health and Epidemiology	Pramod Yadav	Dr. Rajesh Khurana	“Isolation, characterization and anti-biogram of <i>Bacillus cereus</i> from milk products.”





Sr. No.	Subject	Name of Student	Name of Major Advisor	Title of Thesis
27.	Veterinary Surgery and Radiology	Deepanshu	Dr. R.N. Chaudhary	“Evaluation of buprenorphine hydrochloride and fentanyl citrate for postoperative pain management in Buffaloes undergoing Diaphragmatic Herniorraphy.”
28.		Dheeraj Yadav	Dr. Sandeep Potliya	“Evaluation of lignocaine alone and in combination with dexmedetomidine as an anesthetic premedicant in dogs.”
29.		Joney	Dr. Satbir Sharma	“Comparative evaluation of minimal invasive plate osteosynthesis technique and open plating method with applications of collagen for long bone fracture repair in dogs.”

### M.Tech. Degree Completed

Sr. No.	Subject	Name of Student	Name of Major Advisor	Title of Thesis
1.	Dairy Chemistry	Prince	Dr. Ruby Siwach	“Effect of processing conditions during manufacturing of dahi on oxytetracycline residues in buffalo milk.”
2.		Priyanka	Dr. Ruby Siwach	Development and validation of HPLC method for detection of oxytetracycline residues in khoa
3.	Dairy Microbiology	Harisha Devi	Dr. Tejinder Pal Singh	“Development of paneer whey based kefir drink to alleviate gut dysbiosis.”
4.	Dairy Technology	Anuj	Dr. Shalini Arora	“Modification of foxnut starch and its application in low-fat yogurt.”

### Ph.D. Degree Completed

Sr. No.	Subject	Name of Student	Name of Major Advisor	Title of Thesis
1.	Animal Genetics and Breeding	Tejwanti Yadav	Dr. S. S. Dhaka	“Genetic evaluation of test day milk yield vis-à-vis thermotolerance in Murrah buffaloes.”
2.		Anamika	Dr. Ankit Magotra	“Selection strategies for enhancing productivity of synthetic White Leghorn strain of chicken.”
3.		Pradeep Chaudhary	Dr. Ankit Magotra	“Genome wide identification of SNPs and Selection sweeps in Sahiwal and Belahi cattle.”
4.		Rohit Sharma	Dr. S.P. Dahiya	“Genetic evaluation of Murrah buffaloes for performance and stayability traits using Bayesian inference.”
5.		Manita Dangi	Dr. C.S. Patil	“Genetic evaluation of test day milk records of Murrah buffaloes using random regression model.”





Sr. No.	Subject	Name of Student	Name of Major Advisor	Title of Thesis
6.	Animal Nutrition	Shubhnish	Dr. Sajjan Sihag	"Effect of dietary supplementation of betaine on performance and immunity parameters in poultry."
7.	Veterinary and Animal Husbandry Extension Education	Rachna	Dr. Gautam	"An assessment of livelihood security and impact on well being of rural women practicing dairy farming in state of Haryana."
8.	Veterinary Immunology	Pooja Jangra	Dr. Akhil Kumar Gupta	"Construction and characterization of phage display library of bovine single-chain fragment variable antibody after foot and mouth disease and hemorrhagic septicemia combined vaccination."
9.	Veterinary Medicine	Ansu Kumari	Dr. Divya Agnihotri	"Genetic characterization and therapeutic management of <i>Babesia</i> spp. infecting dogs".
10.		Ankit Kumar	Dr. Neelesh Sindhu	"Study and evaluation of evidence based animal welfare biomarkers in cattle."
11.		Praveen Kumar	Dr. Tarun Kumar	"Molecular epidemiology and strategic therapeutics of bovine respiratory disease complex in buffaloes."
12.		Annu Yadav	Dr. Tarun Kumar	"Identification of Bovine Cystatin-C domain as synthetic renal biomarker and determination of antimicrobial resistance of <i>Escherichia coli</i> isolates form bovine urinary tract infections."
13.	Veterinary Microbiology	Ojasvita	Dr. Vandana Bhanot	"Study on the prevalence, molecular characterization and genomic analysis of <i>Staphylococcus aureus</i> causing subclinical mastitis in buffaloes."
14.	Veterinary Parasitology	Pradeep Kumar	Dr. Sukhdeep Vohra	"Epidemiology, molecular identification and resistance profile of gastrointestinal nematodes among equines of Haryana."
15.	Veterinary Pathology	Rakshita Sharma	Dr. Gulshan Narang	"Pathomorphological, molecular and immunohistochemical studies on respiratory pathogens in ruminants with special reference to parainfluenza virus type 3."
16.	Veterinary Public Health and Epidemiology	Kushal Grakh	Dr. Vijay J. Jadhav	"Characterization of <i>Salmonella</i> spp. from poultry farms and development of an aptamer- based detection method."



**CAPACITY BUILDING OF STUDENTS****A. Participation of PG Students in Conferences/Symposia/Scientific Seminars/Deliberations**

Sr. No.	Name of Student	Title, dates and venue of conference etc.	Title of paper/abstract/poster presented
1.	Naveen Kumar Sheoran	International conference on “Global challenges in environment, food and biotechnology for sustainable development” organized by Guru Jambheshwar University of Science and Technology, Hisar on February 21-23, 2024.	Screening of Murrah buffaloes for identification of genetic variations in OLR1 gene
2.	Anamika	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Construction of multi-trait selection indices for genetic improvement of White Leghorn strain of chickens
3.	Rohit Solanki	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Exploration of genetic variation in IGFBP2 gene in large White Yorkshire pigs
4.	Anamika	National conference on “Advances in genetics and genomics for sustainable livestock transformation” and the XVII annual convention of ISAGB organized by ICAR-National Bureau of Animal Genetic Resources, Karnal on November 16-17, 2023.	<ul style="list-style-type: none"> <li>• Prediction of 40 week egg production from early performance traits in synthetic white leghorn strain of chickens using multivariate analysis.</li> <li>• Use of multivariate analysis for prediction of 40 week egg production from morphometric measurements in synthetic white leghorn strain of chickens</li> </ul>
5.	Amandeep	XXI NAVS convocation - cum -scientific convention on “Strategies for enhancing productivity of dairy animals” organized by Guru Angad Dev Veterinary And Animal Sciences University, Ludhiana and NAVS on July 1-2, 2023.	Post-partum polyherbal mixture supplementation to improve production and reproduction parameters in Murrah buffaloes
6.	Anju Bala	XXI NAVS convocation - cum -scientific convention on “Strategies for enhancing productivity of dairy animals” organized by Guru Angad Dev Veterinary And Animal Sciences University, Ludhiana and NAVS on July 1-2, 2023.	<ul style="list-style-type: none"> <li>• Role of mineral mixture supplementation in dairy animals for improving production.</li> <li>• Sustainability of livestock sector: role of government agencies and extension activities</li> </ul>
7.	Rachna	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’	Dairy farming- an entrepreneurial opportunity for rural women





Sr. No.	Name of Student	Title, dates and venue of conference etc.	Title of paper/abstract/poster presented
		livelihood" organized by Lala Lajpat Rai University of Veterinary and Animal Sciences.	
8.	Parikshit Yadav	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers' livelihood" organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Organic livestock farming: an opportunity for Indian farmers
9.	Amandeep	X Annual convention of the society of veterinary science and biotechnology (SVSBT) and national symposium on "Recent biotechnological advances in health, and management of livestock, poultry and companion animals" organized by College of Veterinary Science and AH, Mhow, Indore, M.P on October 5-7, 2023.	Therapeutic management of hydroallantois in a Murrah buffalo
10.	Mohit Kumar	X Annual convention of the society of veterinary science and biotechnology (SVSBT) and national symposium on "Recent biotechnological advances in health, and management of livestock, poultry and companion animals" organized by College of Veterinary Science and AH, Mhow, Indore, M.P on October 5-7, 2023.	Dystocia due to uterine inertia in sow
11.	Naveen Kumar	X Annual convention of the society of veterinary science and biotechnology (SVSBT) and national symposium on "Recent biotechnological advances in health, and management of livestock, poultry and companion animals" organized by College of Veterinary Science and AH, Mhow, Indore, M.P on October 5-7, 2023.	Therapeutic management of post-partum uterine prolapse in buffaloes
12.	Naveen Kumar	X Annual convention of the society of veterinary science and biotechnology (SVSBT) and national symposium on "Recent biotechnological advances in health, and management of livestock, poultry and companion animals" organized by College of Veterinary Science and AH, Mhow, Indore, M.P on October 5-7, 2023.	Dystocia due to foetal cause in buffaloes
13.	Vinay Yadav	38 <sup>th</sup> Annual convention and international symposium on "Frontiers in theriogenology-research and practice" organized by Department of Animal Reproduction Gynecology and Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, on December 6-8, 2023.	Effect of PGF <sub>2α</sub> and GnRH combination based short term estrus synchronization protocols on reproductive efficiency of cyclic Murrah buffaloes.
14.	Rahul	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> Annual Conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers' livelihood" organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Dystocia due to muscular hypertrophy of fetal neck and shoulder in a Murrah buffalo
15.	Naveen Kumar	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> Annual Conference of IAAVR and national symposium on	Dystocia in buffaloes: A study of 20 cases





Sr. No.	Name of Student	Title, dates and venue of conference etc.	Title of paper/abstract/poster presented
		“Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	
16.	Sudarshan Kumar	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Effect of supplementation of nano zinc on post thaw variables and oxidative status of bovine semen
17.	Sudarshan Kumar	38 <sup>th</sup> Annual convention and international symposium on “Frontiers in theriogenology - research and practice” organized by Department of Animal Reproduction Gynecology and Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, on December 6-8, 2023.	Effect of supplementation of zinc on seminal parameters of cattle bull semen
18.	Arushi Kanwar	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Exploring antibiotic alternatives for semen preservation: balancing antimicrobial efficacy with sperm motility and fertility
19.	Priyanka Saharan	International symposium on “Promotion of one health: opportunities, challenges and solutions” and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON) organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on December 7-8, 2023.	Detection and antimicrobial susceptibility pattern in Uro-pathogenic <i>E. coli</i> associated with clinical cases of urinary tract infections in canines
20.	Priyanka Saharan	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Characterization and antimicrobial resistance pattern of biofilm producing uro-pathogenic <i>E. coli</i> in canine urinary tract infections
21.	Khushbu	International symposium on “Promotion of one health: opportunities, challenges and solutions” and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON) organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on December 7-8, 2023.	Occurrence and risk assessment of antibiotic residues in layer eggs in Haryana, India
22.	Khushbu	XXI NAVS Convocation - cum -Scientific Convention on “Strategies for Enhancing Productivity of Dairy Animals” organized by Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana and NAVS on July 1-2, 2023.	Occurrence of tetracycline resistant <i>E. coli</i> in layer farms of Haryana, India





Sr. No.	Name of Student	Title, dates and venue of conference etc.	Title of paper/abstract/poster presented
23.	Diksha Kandpal	XIX Annual conference of Indian Association of Veterinary Public Health Specialist (IAVPHS) organized by Department of Veterinary Public Health and Epidemiology, organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on December 7-8, 2023.	Soil mediated helminthiasis: A study on neglected tropical disease in wild animals in Haryana
24.	Diksha Kandpal	Veterinary pathology congress-2023 jointly organized by the Indian association of veterinary pathologists, Indian college of veterinary pathologists organized by Centre for Animal Disease Research and Diagnosis (CADRAD, ICAR-Indian Veterinary Research Institute Izatnagar, Bareilly (UP), India on December 20-22, 2023.	Hepatic parasitic granuloma in a horse
25.	Paras Saini	XIX Annual conference of Indian association of veterinary public health specialist (IAVPHS) organized by Department of Veterinary Public Health and Epidemiology, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on December 7-8, 2023.	Serotyping and antibiotic resistance patterns of avian pathogenic <i>Escherichia coli</i> isolates from broiler chicken flocks in Haryana
26.	Paras Saini	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers' livelihood" organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Bacteriological isolation, characterization and pathological studies of <i>Escherichia coli</i> from pulmonary affections in ruminants of Haryana
27.	Gaurav Kumar	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of association of animal scientists and national symposium on "Technological intervention for improving animal health and productivity" organized by Apollo College of Veterinary Medicine, Jaipur (Rajasthan) on February 17-19, 2024.	Surgical management of electrocution in Rhesus monkey
28.	Sulekha	46 <sup>th</sup> Annual congress of Indian society for veterinary surgery and national symposium on "Emerging trends in farm, companion and wild animal surgery" organized by Department of Surgery and Radiology, College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar (Odisha) from December 6-8, 2023.	Surgical management of bilateral ocular dermoid cyst in a day-old calf
29.	Sulekha	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers' livelihood" organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Surgico-pathological study of ocular squamous cell carcinoma in Hariana cow
30.	Sulekha	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of association of animal scientists and national symposium on "Technological intervention for improving animal health and productivity" organized by Apollo College of Veterinary Medicine, Jaipur (Rajasthan) on February 17-19, 2024.	Diagnosis and surgical management of unusual oesophageal foreign body in a camel





Sr. No.	Name of Student	Title, dates and venue of conference etc.	Title of paper/abstract/poster presented
31.	Alpa	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Surgical management of large size congenital bilateral corneo - conjunctival dermoid cyst in cattle calf
32.	Alpa	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of association of animal scientists and national symposium on “Technological intervention for improving animal health and productivity” organized by Apollo College of Veterinary Medicine, Jaipur (Rajasthan) on February 17-19, 2024.	Surgical management of femoral fracture in cat using intramedullary and extramedullary fixation
33.	Kajal Bhardwaj	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Exploring the anti-inflammatory potential of morin nanoparticles in wistar rats: a pharmacological investigation
34.	Arun Singh	46 <sup>th</sup> Annual congress of Indian society for veterinary surgery and national symposium on “Emerging trends in farm, companion and wild animal surgery” organized by Department of Surgery and Radiology, College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar (Odisha) from December 6-8, 2023.	Attended the conference
35.	Ansu Kumari	4 <sup>th</sup> Annual convention and national symposium of veterinary internal and preventive medicine society (VIPMS) on “Advancing veterinary medicine for holistic development of animal health and productivity with a one health approach” organized by Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J) on December 18-19, 2023.	Etiologies and clinic-pathologic findings associated with ascites in dogs
36.	Pooja	4 <sup>th</sup> Annual convention and national symposium of veterinary internal and preventive medicine society (VIPMS) on “Advancing veterinary medicine for holistic development of animal health and productivity with a one health approach” organized by Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J) on December 18-19, 2023.	Application of immunoglobulins in diagnosis and treatment of Canine Parvo viral infection
37.	Shivani Rohilla	24 <sup>th</sup> Indian veterinary congress and 31 <sup>st</sup> annual conference of IAAVR and national symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood” organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar on February 7-8, 2024.	Attended the conference





## B. Participation of PG Students in Trainings/ Workshops

Sr. No.	Name of Student	Title of Training/Workshop	Organized by	Date
1.	Naveen Kumar Sheoran	Scientific pig rearing practices	Department of Livestock Farm Complex, LUVAS, Hisar	March 5-7, 2024
2.	Mohit Singh	Scientific pig rearing practices	Department of Livestock Farm Complex, LUVAS, Hisar	March 5-7, 2024
3.	Vikas Rathee	Scientific pig rearing practices	Department of Livestock Farm Complex, LUVAS, Hisar	March 5-7, 2024
4.	Simran Kaur	Scientific pig rearing practices	Department of Livestock Farm Complex, LUVAS, Hisar	March 5-7, 2024
5.	Ritu	National Workshop cum Training on Buffalo Production Management	Department of Livestock Production Management, LUVAS, Hisar	October 25-27, 2023
6.	Meetu	National Workshop cum Training on Buffalo Production Management	Department of Livestock Production Management, LUVAS, Hisar	October 25-27, 2023
7.	Radha Bai	National Workshop cum Training on Buffalo Production Management	Department of Livestock Production Management, LUVAS, Hisar	October 25-27, 2023
8.	Shabnum	National Workshop cum Training on Buffalo Production Management	Department of Livestock Production Management, LUVAS, Hisar	October 25-27, 2023
9.	Amandeep	10 days High-End Workshop (Karyashala) on Climate Smart Livestock Farming for Sustainable Production	ICAR- Indian Veterinary Research Institute, Izzatnagar	September 18-27, 2023
10.	Lohit Sharma	Introduction to wildlife health and forensics organised by school of wildlife health and forensics, Jabalpur (M.P)	Nanaji Deshmukh Veterinary Science University, Jabalpur	May 20-22, 2024
11.	Pooja Rani	Climate-smart Production and Processing Technology for Carbon Neutral Meat and Dairy Foods	ICAR- Indian Veterinary Research Institute and MANAGE, Hyderabad Off-Campus Online Collaborative Training Program	August 05-09, 2024.
12.	Pooja Rani	Prospects and applications of Artificial intelligence in Livestock sector	Guru Angad Dev Veterinary And Animal Sciences University and MANAGE, Hyderabad Collaborative Online Training Program	July 19-21, 2023
13.	Pooja Rani	National Workshop-cum-Training on Development and Quality Evaluation of Functional Livestock Products	Department of Livestock Products Technology, LUVAS, Hisar	February, 27-29 2024
14.	Pramod Kumar	Workshop on NARES Blended Learning platform	ICAR and Directorate of Human Resource Management, LUVAS, Hisar	November 03-04, 2023
15.	Lalita Garg	National Workshop-cum-Training on Development and Quality Evaluation of Functional Livestock Products	Department of Livestock Products Technology, LUVAS, Hisar	February 27-29, 2024
16.	Bhawna Indora	National Workshop-cum-Training on "Development and Quality Evaluation of Functional Livestock Products	Department of Livestock Products Technology, LUVAS, Hisar	February 27-29, 2024





Sr. No.	Name of Student	Title of Training/Workshop	Organized by	Date
17.	Pooja Rani	Workshop on NARES Blended Learning platform	ICAR and Directorate of Human Resource Management, LUVAS, Hisar	November 03-04, 2023
18.	Pooja Rani	National Workshop-cum-Training on Buffalo Production Management	Department of Livestock Production Management, LUVAS, Hisar	October 25-27, 2024
19.	Priyanka Saharan	Principles and Practice of Epidemiology	ICAR-NAHEP-CAAST at Mumbai Veterinary College, Parel	July 3-12, 2023
20.	Priyanka Saharan	Fundamentals of Anatomic Pathology and Post-Mortem Examination of Domestic Animals and Poultry	Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar	September 26-28, 2023
21.	Priyanka Saharan	Data visualization, and analytics with excel power BI, Tableau, and Generative AI	Online training organized by PG Department of Computer Applications and IQAC Marian college Kuttikkanam in association with ipsr solutions limited and Valin-UK, USA and Canada	July 5-11, 2024
22.	Arju	Pharmacological techniques for evaluation of CNS active drugs	Department of Veterinary Pharmacology and Toxicology, LUVAS, Hisar	February 1-3, 2024
23.	Arju	Skin examination for parasitic diseases	Department of Veterinary Parasitology, LUVAS, Hisar	February 19-21, 2024
24.	Shweta Valecha	Workshop on QSAR based Computational Drug designing and its Application	ICAR- NRCE, Hisar	July 6-8, 2023
25.	Shweta Valecha	Skin examination for parasitic diseases	Department of Veterinary Parasitology, LUVAS, Hisar	February 19-21, 2024
26.	Sulekha	Hands-on training in Diagnostic Imaging Techniques in Veterinary Clinical Practices	Department of Veterinary Clinical Complex, LUVAS, Hisar	February 26-28, 2024
27.	Alpa	Hands-on training in Diagnostic Imaging Techniques in Veterinary Clinical Practices	Department of Veterinary Clinical Complex, LUVAS, Hisar	February 26-28, 2024
28.	Swanand Kulkarni Sanjay	SERB KARYASHALA: High-end Workshop on Hands-on Training on Advance Tools and Techniques for Unravelling Physiological Processes in Poultry	ICAR- Central Avian Research Institute, Bareilly	January 09-18, 2024
29.	Shivani Rohilla	Hands on Training in Diagnostic Imaging Techniques in Veterinary Clinical Practices	Department of Veterinary Clinical Complex, LUVAS, Hisar	February 26-28, 2024
30.	Shivani Rohilla	Workshop-cum-Training on Skin Examination for parasitic diseases	Department of Veterinary Parasitology, LUVAS, Hisar	February 19-21, 2024
31.	Ritik Koul	International day for disaster risk reduction: Inequality to Empowerment for Disaster Resilience	National Institute of Disaster Management, Ministry of Home affairs, Government of India, Rohini, Delhi	October 13, 2023
32.	Ritik Koul	Two day workshop - NARES-Blended learning platform under NAHEP component-2 project	ICAR, Delhi and Directorate of Human Resource Management, LUVAS, Hisar	November 03-04, 2023





### C. Awards Received by PG Students

Sr. No.	Name of Student	Department	Name of Award	Awarding organization
1.	Amandeep	Livestock Production Management	3 <sup>rd</sup> prize in poster presentation	National conference of Indian society for buffalo development and symposium on "Modern approaches for sustainable buffalo production in the scenario of climate change" organized by DUVASU, Mathura on October 27-28, 2023.
2.	Amandeep	Livestock Production Management	Best poster presentation award	XXI NAVS convocation - cum -scientific convention on "Strategies for enhancing productivity of dairy animals" organized by GADVASU, Ludhiana and NAVS on July 1-2, 2023.
3.	Pooja Rani	Livestock Products Technology	Third position in national quiz competition on "One World: One Health	Centre for diagnosis, surveillance and response of zoonotic disease (PGIVER, Jaipur, RAJUVAS) on July 6, 2023.
4.	Rachna	Veterinary and Animal Husbandry Extension Education	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
5.	Hitesh	Veterinary Gynaecology and Obstetrics	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
6.	Pradeep	Veterinary Gynaecology and Obstetrics	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
7.	Naveen Kumar	Veterinary Gynaecology and Obstetrics	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
8.	Rahul	Veterinary Gynaecology and Obstetrics	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
9.	Amandeep	Veterinary Gynaecology and Obstetrics	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock





<b>Sr. No.</b>	<b>Name of Student</b>	<b>Department</b>	<b>Name of Award</b>	<b>Awarding organization</b>
				health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
10.	Sudarshan Kumar	Veterinary Physiology and Biochemistry	Best poster presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
11.	Priyanka Saharan	Veterinary Public Health and Epidemiology	Best poster presentation award	International symposium on "Promotion of one health: opportunities, challenges and solutions" and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON)" organized by LUVAS, Hisar on December 7-8, 2023.
12.	Khushbu	Veterinary Public Health and Epidemiology	Best poster presentation award	International symposium on "Promotion of one health: opportunities, challenges and solutions" and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON)" organized by LUVAS, Hisar on December 7-8, 2023.
13.	Arju	Veterinary Pathology	Third position for poster presentation	International symposium on "Promotion of one health: opportunities, challenges and solutions" and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON)" organized by LUVAS, Hisar on December 7-8, 2023.
14.	Arju	Veterinary Pathology	Third position for oral presentation	International symposium on "Promotion of one health: opportunities, challenges and solutions" and XIX annual conference of Indian association of veterinary public health specialists (IAVPHSCON)" organized by LUVAS, Hisar on December 7-8, 2023.
15.	Arju	Veterinary Pathology	Third prize for poster presentation	National Seminar on "Role of satellite technology to transform livestock farming" organized by LUVAS, Hisar on February 28, 2024.
16.	Arju	Veterinary Pathology	First position in student elocution contest-XVI (zone 6)	Student Elocution Contest-XVI (Zone 6) on "Transformation of the agri-food system for achieving sustainable development goals" organized by SKAUST-Jammu on August 28, 2023.





Sr. No.	Name of Student	Department	Name of Award	Awarding organization
17.	Arju	Veterinary Pathology	First position in declamation	Declamation contest on occasion of World Veterinary Day-2024 organized by LUVAS, Hisar on April 27, 2024.
18.	Diksha Kandpal Diksha Sharma, Rakshita Sharma, Paras Saini	Veterinary Pathology	Third position for oral presentation	XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS) organized by Department of Veterinary Public Health and Epidemiology, organized by LUVAS, Hisar on December 7-8, 2023.
19.	Gaurav Kumar	Veterinary Surgery and Radiology	"First Prize" for Best research paper presented in the Clinical Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
20.	Gaurav Kumar	Veterinary Surgery and Radiology	"Second Prize" for Best poster presented in the Wildlife Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
21.	Sulekha	Veterinary Surgery and Radiology	"First Prize" for Best research paper presented in the Clinical Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
22.	Sulekha	Veterinary Surgery and Radiology	"Appreciation Award" for Best poster presented in the Large Animal Poster Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
23.	Deepanshu	Veterinary Surgery and Radiology	"Appreciation Award" for Best research paper presented in the Anaesthesiology Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
24.	Sahil	Veterinary Surgery and Radiology	"Appreciation Award" for Best research paper presented in the Ruminant Surgery Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
25.	Alpa	Veterinary Surgery and Radiology	"Appreciation Award" for Best poster presented in the Large Animal Poster Session	46 <sup>th</sup> Annual congress of ISVS and national symposium on emerging trends in farm, companion and wild animal





Sr. No.	Name of Student	Department	Name of Award	Awarding organization
				surgery" organized by Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar on December 6-8, 2023.
26.	Alpa	Veterinary Surgery and Radiology	"First Prize" for Best research paper presented in the Clinical Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
27.	Alpa	Veterinary Surgery and Radiology	"First Prize" for Best research paper presented in the Wildlife Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
28.	Suhaas	Veterinary Surgery and Radiology	"Second Prize" for Best poster presented in the Wildlife Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
29.	Sangeet Rana	Veterinary Surgery and Radiology	"Appreciation Award" for Best poster presented in Large Animal Poster Session	46 <sup>th</sup> Annual congress of ISVS and national symposium on emerging trends in farm, companion, and wild animal surgery" organized by Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar on December 6-8, 2023.
30.	Shivam Rakheja	Veterinary Surgery and Radiology	"Second Prize" for Best poster presented in the Wildlife Science Session	2 <sup>nd</sup> Veterinary and animal science congress and 2 <sup>nd</sup> annual convention of the association of animal scientists (AAS), organized by Apollo College of Veterinary Medicine, Jaipur, Rajasthan on February 17-19, 2024.
31.	Kajal Bhardwaj	Veterinary Pharmacology and Toxicology	Prof. (Dr.) Rishendra Verma Young Scientist Award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
32.	Devashish	Veterinary Medicine	Third best oral presentation award	31 <sup>st</sup> Annual conference of IAAVR and national symposium on "livestock health and poultry: a paradigm change to





Sr. No.	Name of Student	Department	Name of Award	Awarding organization
				maximize productivity for sustainable farmers livelihood" organized by LUVAS, Hisar on February 7-8, 2024.
33.	Ansu Kumari	Veterinary Medicine	Third position in oral paper presentation	4 <sup>th</sup> Annual convention and national symposium of veterinary internal and preventive medicine society (VIPMS) on "Advancing veterinary medicine for holistic development of animal health and productivity with a one health approach" organized by Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J) on December 18-19, 2023.





# RESEARCH

## RESEARCH PRIORITIES

### i. Animal Health

- ❖ Surveillance of diseases of buffaloes, cattle, sheep, goats and poultry in Haryana; development of disease forecasting systems and parasitic disease investigations
- ❖ Development of immunodiagnostics for diseases of economic and zoonotic importance
- ❖ Development of molecular diagnostics for various bacterial, viral, and protozoan diseases
- ❖ Development of protocols for quality assurance of foods of animal origin
- ❖ Carrying out toxicological, pharmaco-dynamic and pharmacokinetic studies of various drugs, agro-chemicals, and medicinal plants
- ❖ Development of therapeutics for metabolic disorders
- ❖ Development and evaluation of safe and cost-effective anaesthetics and analgesics for use in farm animals
- ❖ Enhancement in reproductive efficiency of farm animals and reduction in generation interval through assisted reproductive technology
- ❖ Development of kits for pregnancy diagnosis and oestrous detection in farm animals

### ii. Animal Production

- ❖ Genetic improvement, conservation, management, nutritional requirements, feeding practices, and production of various livestock species
- ❖ Evolving new breeds of dairy cattle, sheep, and poultry suited to agro-climatic conditions of Haryana
- ❖ Use of molecular markers for characterization of livestock breeds and their correlation with production
- ❖ Development of protocols for quality testing of cattle and buffalo semen/body fluids for genetic disorders and infectious agents using molecular techniques
- ❖ Identification and detoxification of toxic constituents in different livestock and poultry feedstuffs
- ❖ Development of economically viable livestock farming system under different agro-climatic and socio-economic conditions
- ❖ Application of cutting-edge technologies for processing, production, preservation, packaging, and marketing of milk, meat, and value-added products for domestic and international market
- ❖ Strengthening of research extension linkages for effective technology transfer and feedback in animal production systems
- ❖ Breeding and management of laboratory animals viz., rabbits, rats, mice, hamsters, and guinea pigs for teaching and research

## LIST OF RESEARCH SCHEMES

Type of Research Schemes	Number	Funding agency
Plan Schemes	44	Haryana State
Non-Plan Schemes	09	Haryana State
Externally funded projects	44	RKVY, ICAR, RGM, DST, DBT, HSCSIT, ICMR, BIRAC, DTRA (USA)
Self-Finance Schemes	10	Own income
Institutional Projects	13	LUVAS, Hisar
<b>Total</b>	<b>120</b>	





## LIST OF RESEARCH SCHEMES

### Plan Schemes

1. 114-B-V-(SI)-VPHE-3-Development Work: Disease investigation services and education of scheduled caste farmers of Haryana for better animal health
2. 120-C(a)-ABT-1-Development Work: Use of molecular markers for characterization of livestock breeds and their relations with traits of economic importance
3. 121-C(a)-ABT-2-Development Work: Development of molecular diagnostics for blue tongue virus & *peste des petits ruminants* virus (PPRV)
4. 122-C(a)-ABT-3-Development Work: Development of reproduction biotechnic for improvement of farm animal fertility
5. 123-C(a)-VCL-1-Development Work: Strengthening of Central Laboratory of Veterinary College
6. 124-C(a)-VCL-2-Development Work: Etiology and diagnosis of mastitis and infectious abortion in animals
7. 125-C(a)-VPHE-1-Development Work: Surveillance and monitoring of economically important diseases of livestock and poultry
8. 126-C(a)-VPHE-2-Development Work: Epidemiology of infectious and toxic disease conditions of livestock and poultry in different regions of Haryana
9. 127-C(a)-VPHE-3-Development Work: Safety aspects of food of animal origin
10. 128-C(a)-VPT-1-Development Work: Pathological investigations of the diseases affecting various systems of poultry
11. 129-C(a)-VPT-2-Development Work: Pathological studies of various infectious and non-infectious diseases of livestock
12. 130-C(a)-TVCC(Knl.)-1-Development Work: Studies on dysfunctions of intestines in animals and their management
13. 131-C(a)-TVCC(Hsr)-2-Development Work: Studies on incidence, etiology, diagnosis and treatment of skin disease in animals
14. 132-C(a)-VAH-1-Development Work: Gross and microscopic anatomy of different organs in ruminants
15. 133-C(a)-VPB-1-Development Work: Biochemical changes in health and disease of livestock
16. 134-C(a)-VPB-2-Development Work: Studies on digestive physiology of ruminants
17. 135-C(a)-VPB-3-Development Work: Improvement in farm animal fertility by modulating seminal traits
18. 136-C(a)-VPB-4-Development Work: Physiological and endocrinological investigations for augmenting reproduction and production in farm livestock
19. 137-C(a)-VCM-1-Development Work: Investigation into the prevalence, etiology, diagnosis treatment and control of mastitis and metabolic/nutritional deficiency disorders in animals
20. 138-C(a)-VMI-1-Development Work: Studies on infection and immunity in relation to foot and mouth disease virus and Haemorrhagic septicemia
21. 139-C(a)-VPS-1-Development Work: Studies on epidemiology, pathobiology and integrated management of animal & poultry parasites in western Haryana
22. 140-C(a)-VPTX-1-Development Work: Pharmacological and toxicological studies of newer drugs, herbals and agrochemicals in animals and poultry
23. 141-C(a)-VSR-1-Development Work: Studies on management of surgical disorders in domestic animals
24. 142-C(a)-VUK-1-Development Work: Establishment of LUVAS regional centre at Karnal
25. 143-C(a)-AGB-1-Development Work: Genetic improvement of Jakhrana goat for prolificacy and mutton production
26. 144-C(a)-AGB-2-Development Work: Establishment of an elite herd of Sahiwal cattle for conservation, genetic improvement and dissemination
27. 145-C(a)-AGB-3-Development Work: In situ conservation of Munjal and Nali sheep for genetic improvement and dissemination





28. 146-C(a)-AGB-4-Development Work: Genetic improvement in poultry and different species of livestock
29. 147-C(a)-AN-1-Development Work: Economic quality feed manufacturing for ruminants and poultry
30. 148-C(a)-AN-2-Development Work: Nutritional studies in livestock and poultry
31. 149-C(a)-AN-3-Development Work: Amelioration of mineral deficiency/ toxicity in livestock of Haryana state
32. 150-C(a)-LPM-2-Development Work: Strengthening of Buffalo Research Centre
33. 151-C(a)-LPM-3-Development Work: Quantification of management practices for livestock and poultry
34. 152-C(a)-LPT-2-Development Work: Studies on Indian milk products and training thereon
35. 153-C(a)-LPT-3-Development Work: Standardization of processing technology for meat and poultry products
36. 161-DTR-1-HPVK-1-Development Work: Strengthening facilities of Haryana Pashu Vigyan Kendra (HPVK) of LUVAS at Mahendragarh
37. 162-DTR-1-HPVK-2-Development Work: Strengthening facilities of Haryana Pashu Vigyan Kendra (HPVK) of LUVAS at Uchani, Karnal
38. 163-DTR-1-HPVK-3- Dev. Work: Strengthening facilities of HPVK of LUVAS at Lakaria, Jhajjar
39. 164-DTR-1-HPVK-4- Dev. Work: Strengthening facilities of Haryana Pashu Vigyan Kendra of LUVAS at Keorak (Kaithal)
40. 167-C(a)-VGO-1-Development Work: Incidence and etiology of various reproductive problems of ruminants in the state of Haryana and treatment thereof (State Scheme)
41. 168-C(a)-LFC-1-Development Work: Studies on the farm practices in different species of livestock and poultry
42. 169-C(a)-VAHEE-Development Work: Constraints in the livestock production systems development in Haryana
43. 170-C(a)-HPVK-6 -Development work: Establish-

ment and strengthening of HPVK Bahal, (Bhiwani)

44. 172-C(a)-HPVK-5 (Makhosarani)-Development Work

## Non Plan Schemes

45. 07/C(a)-DTR-1-Non Development Work: Directorate of Research
46. 08/C(a)-AGB-1-Non Development Work (Vety.): Conservation and genetic improvement of indigenous livestock breeds
47. 09/C(a)-VPHE-1-Non Development Work: Research and Referral Laboratory at Hisar
48. 15/C(a)-DTR-1-HPVK-1-Non-Development Work: Haryana Pashu Vigyan Kendra of LUVAS at Riwasa, Mahendragarh
49. 16/C(a)-DTR-1-HPVK-2-Non-Development Work: Establishment of HPVK, Karnal
50. 17/C(a)-DTR-1-HPVK-3-Non-Development: Establishment of HPVK of LUVAS at Lakaria, Jhajjar
51. 18/C(a)-DTR-1-HPVK-4-Non-Development: Establishment of HPVK of LUVAS at Keorak, Kaithal
52. 23-C(a)-DTR-1-HPVK-5 Non-Development: Establishment of HPVK of LUVAS at Makhosarani, Sirsa
53. C(a)-DTR-1-HPVK-6-Non-Development (Bahal, Bhiwani): Establishment of HPVK of LUVAS at Bahal, Bhiwani

## Externally Funded Projects

54. 4064(PFMS)-C(g)-VSR-03-OA(RKVV): Strengthening and upgradation of facilities and services for diagnostic imaging in different diseases of animals.
55. 4066(PFMS)-C(g)-AGB-06-OA(RKVV): Productivity enhancement of Scheduled Caste goat farmers through awareness programs and latest molecular techniques.
56. 4067(PFMS)-C(g)-VPS-01-OA(RKVV): Strengthening of diagnostic facilities for vector-borne haemoparasitic diseases and creation of awareness amongst farmers for disease control.
57. 4068(PFMS)-C(g)-VSR-04-OA(RKVV): Strengthening and upgradation of radiological facilities for diagnosis of different diseases of animals.





58. 4070(PFMS)-C(g)-LFC-02-RKVY-SCSP: Establishment of piggery unit for propagation and dissemination of superior germplasm to Scheduled Caste farmers of Haryana state.

59. 4071(PFMS)-C(g)-VPB-03-OA(RKVY): Upgradation of existing semen laboratory for strengthening of AI services and providing animal infertility diagnostic facilities to livestock owners.

60. 4072(PFMS)-C(g)-CODST-05-RKVY-RAFTAAR: Establishment of milk and milk product testing laboratory.

61. 4073(PFMS)-C(g)-VMD-01-RKVY-RAFTAAR: Strengthening of diagnostic and research facilities for infectious and non-infectious diseases in dairy animals.

62. 4074(PFMS)-C(g)-VSR-05-RKVY-RAFTAAR: Strengthening of diagnostic imagining facilities for large and small animals.

63. 4075(PFMS)-C(g)-LPM-04-RKVY-RAFTAAR: Development of various buffalo production and management modules for different category of dairy farmers.

64. 5003-C(b)-VBH-14-ICAR: Centre of Advanced Faculty Training in Veterinary Microbiology.

65. 5508-C(b)-LPM-3-ICAR: Network Project on Buffalo improvement Centre at LUVAS, Hisar.

66. 5511-C(b)-VPHE-2-ICAR: All India Coordinated Research Project on Animal Disease Monitoring and Surveillance.

67. 5526-C(b)-AGB-1-ICAR (AICRP): ICAR-Sahiwal Data Recording Unit.

68. 5531-C(b)-Micro-08(ES)-ICAR: Production and application of bovine interleukin-17 and anti-IL-17 monoclonal antibodies.

69. 5535-C(b)-VCC-02-ICAR: Development of vaccine against animal's haemoprotzoan parasites for mitigating biotic stress.

70. 5536-C(b)-Vety.Patho-06-ICAR: Development and Evaluation of genetically engineered vaccine candidates for African swine fever, Equine herpes virus-1 and Equine influenza (clade 1 & 2).

71. 5537-C(b)-VPB-07-ICAR: Study on immune exhaustion and metabolic reprogramming by *Mycobacterium avium* subspecies *paratuberculosis* in bovines.

72. 5539(PFMS)-C(b)-VMI-06-ICAR: Foot and Mouth Disease - Hisar Centre.

73. NASF/MA-9015/2022-23/VPB: Metabolomics fingerprinting of body fluids for development of a metabolite-based novel semen extender for enhancing fertility of bull sperm and diagnostic assays for detection of sub-clinical hemoprotzoan diseases in cattle.

74. 5040-C(g)-DR-04-OA(RGM): Implementation of embryo transfer and in vitro fertilization technologies for bovine breeding at LUVAS, Hisar.

75. 5048-C(g)-VPB-05-OA: Study of plant/candidate feed supplement to reduce methane production without affecting productivity in buffaloes.

76. 5049-C(g)-AGB-07-OA: Genome scanning for identification of economically important traits related markers in goat: a step towards improving economy of goat farmers in Haryana.

77. 5055-C(g)-LFC-03-OA(HSCSIT): Molecular interventions to improve reproductive efficiency in Murrah buffaloes of Haryana state.

78. 5056-C(g)-VMI-06-OA (HSCSIT): Production and characterization of foot-and-mouth disease virus specific nanobodies for application as diagnostic reagents.

79. 5057-C(g)-ABT-18-OA(HSCSIT): Development of field-based diagnostics for porcine viral pathogens and their molecular epidemiology.

80. 5060-C(g)-DR-06-OA: Latest technologies for enhancing production and reproduction in dairy animals.

81. 5061-C(g)-VPB-06-OA: Meat & egg sustainability through integrated poultry productivity improvement

82. 5063-C(g)-ABT-19-OA(HSCSIT): Identification of novel peptide biomarkers in saliva of buffalo for early pregnancy diagnosis.

83. 5064-C(g)-VGO-01-OA(HSCSIT): Size-specific follicles selection and identification of non-invasive





biomarkers of oocyte competence and embryo development in buffalo.

84. 5065-C(g)-Uchani(Karnal)-03-OA(HSCSIT): Elucidating the role of circulatory miRNA as possible biomarker in bovine theileriosis.

85. 5066-C(g)-DR-07-OA(HSCSIT): Role of satellite technology to transform livestock farming.

86. 5067(PFMS)-C(g)-VPHE-12-OA(DBT): DBT Network Programme on anthrax diagnosis and control in India (Component-1).

87. 5068(PFMS)-C(g)-ABT-20-OA(DBT): DBT Network Programme on anthrax diagnosis and control in India (Component-2).

88. 5069(PFMS)-C(g)-ABT-21-OA(DBT): DBT Network Programme on anthrax diagnosis and control in India (Component-3).

89. 5070(PFMS)-C(g)-LFC-05-OA(DST): Molecular interventions to increase litter size in pigs for improving socioeconomic status of rural scheduled caste families in Haryana.

90. 5072(PFMS)-C(g)-COVS(CCL)-01-OA(9129): Strengthening of the Sentinel Surveillance Sites.

91. 5073-C(b)-VPHE-14-OA(ICMR): Genetic characterization of zoonotic *Echinococcus granulosus* genotypes in slaughtered small ruminants.

92. 5074-C(b)-ABT-22-OA(BIRAC): Development of pen-side diagnostics for porcine infectious diseases with particular reference to porcine circovirus and classical swine fever virus.

93. 5075(PFMS)-C(g)-COVS(CCL)-02-OA(DBT-0150): Specific single domain antibodies (sdAbs) against antimicrobial resistant mastitis pathogens for clinical therapeutic use in dairy animals.

94. 5082-C(g)-VPS-01-OA(SERB): Unravelling the genealogy and population structure of *Babesia bovis*: An emerging haemoprotzoan parasite of cattle.

95. 5084-C(b)-ABT-23-OA (DBT): Development and applications of chicken phage display single chain variable fragment (scFv) library against Newcastle disease virus (NDV) in poultry.

96. 5086(PFMS)-C(g)-ABT-24-OA (DST-1819): Studies

on antiviral and immune-modulatory potential of nano-formulation of indigenous plant extract against Newcastle disease virus in poultry.

97. 6001-C(g)-PSU-USA-VPHE-09-OA: Accelerating bovine tuberculosis control in developing countries.

## Self-Finance Schemes

98. SF-37: Milk Supply Scheme.

99. SF-38: Quality feed manufacturing for different livestock and poultry species maintained at animal farm of LUVAS–Hisar.

100. SF-39: Diagnostic services to the livestock and poultry farmers in Haryana.

101. SF-44: To provide services for diagnosis and treatment of clinical cases of animals.

102. SF-46: Diagnosis and treatment of large and small animals.

103. SF-47: To provide services for microbial and serological diagnostics services related to mastitis, abortion and sexually transmitted diseases and other clinical conditions in domestic animals.

104. SF-48: Skill up-gradation of teachers/scientists and students in the area of Animal Biotechnology.

105. SF-51: Propagation and dissemination of superior germplasm of chickens and skill development in various domains of animal genetics and breeding.

106. SF-52: Dissemination of scientific knowledge and technologies through training for skill development of farmers of Haryana State.

107. SF-53: Strengthening and up-gradation of diagnostic and extension facilities for benefit of livestock farmers.

## Institutional Projects

108. 509/AIP/VGO/Development Work: Ozone therapy in treatment of sub-clinical endometritis in repeat breeding buffaloes.

109. 512/AIP/LPM/Development Work: Livestock waste utilization through establishment of vermicompost unit.

110. 515/AIP/CoDST/Development Work: Studies on the development of fox-nut (Makhana) fortified functional paneer.

111. 516/AIP/VCC/Development Work: Cytogenetic





analysis of bovine monster calf and dam of Haryana region.

112. 517/AIP/HPVK(Karnal)/Development Work: Study on melatonin therapy to ameliorate ischemia reperfusion induced damage in uterine affected buffaloes.

113. 518/AIP/VMI/Development Work: Development of real-time PCR assay for detection of Porcine.

114. 519/AIP/VAHEE/Development Work: Assessment of integrated crop livestock farming systems in Haryana.

115. 520/AIP/VPTX/Development Work: Experimental study on wound healing potentials of quercetin in goats and evaluation of its clinical efficacy in livestock and companion animals.

116. 521/AIP/Vety. Parasitology/Dev. Work: Targeting calcium homeostasis as a strategy against surra organism.

117. 522/AIP/Vety. Pathology/Dev. Work: Pathomorphological evaluation and screening of breast cancer gene markers in mammary tumours of dogs.

118. 524/AIP/HPVK/M.Garh: A study on associated risk factors, clinical findings and therapeutic management of subacute ruminal acidosis (SARA) in bovine.

119. 526/AIP/HPVK/Karnal/Dev. Work: Investigation of alternation in cardiac biomarkers and acute phase protein profile in cattle infected naturally with tropical theileriosis as indicators of animal welfare.

120. 527/AIP/VMI/02/Dev. Work: Expression and characterization of scFv clones selected against FMD serotype "O" from bovine scFv-phage display library.

## RESEARCH HIGHLIGHTS

### 1. Animal Biotechnology

- Isothermal amplification assays (RPA technology) have been developed for rapid detection of Porcine Enterovirus G (PEV-G) and Classical swine fever virus (CSFV) (Fig. 1).
- Another format of isothermal amplification assays- The Polymerase Spiral Reaction (PSR technology) has been developed for rapid detection of Porcine Enterovirus G (PEV-G) (Fig. 2). These assays are convenient, rapid, sensitive and specific tools for the diagnosis of important porcine diseases at the point of need.
- Gold nanoparticles and peptide aptamer magnetic nanoparticles-based assays have been developed for diagnosis of Anthrax (Fig. 3).
- Recombinant bovine HY antigen protein has been expressed in *E. coli* (BL21) host, affinity purified and can be utilized for sex sorting of bovine semen (Fig.4).
- The complete genome of Pigeon torque teno virus (PTTV) has been sequenced successfully from biological samples of infected pigeon. To the best of our knowledge, this is first report of detection and whole genome sequence characterisation of PTTV from India (Fig. 5).
- Differentiating proteins have been detected in HPLC analysis of saliva of early pregnant buffalo. Further studies are required to establish the biomarker potential of the proteins in pregnancy diagnosis (Fig. 6).
- Complete genome sequence of *Acinetobacter iwoffii* has been generated using sequencing by synthesis method at MiSeq Illumina platform of the department. *Acinetobacter iwoffii* is a gram-negative aerobic bacillus which was isolated from pneumonic ruminant in the department of Veterinary Pathology. This genome information will be helpful in establishing the pathogenesis (Fig. 7).
- A novel protocol has been developed for synthesis of silver nanoparticle using Giloy, Tulsi and Ashwagandha using green synthesis method. This is the new initiative of the department (Fig. 8).
- The complete ORF of hemagglutinin-neuraminidase (HN) gene of Newcastle disease virus genotype II was amplified and cloned in expression vector for heterologous expression in *E. coli* (BL21) (Fig. 9).
- Concurrent infections of Canine Distemper Virus (CDV) and Canine Parvovirus (CPV) were detected in unvaccinated dogs suffering from gastroenteritis and nervous signs (Fig. 10).
- High sero positivity (56 %) of Bovine herpesvirus-1 (BoHV-1) was observed in bovines. However, the molecular prevalence was very low (1 out of 22 samples) in buffalo and cattle suffering from reproductive disorders like abortion and repeat breeding.



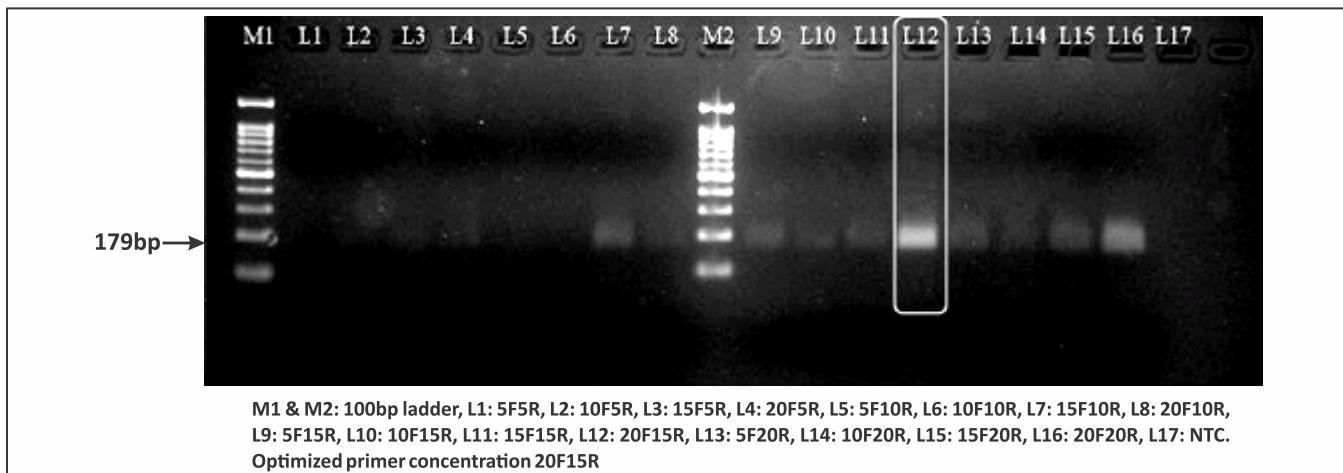


Fig. 1. Amplification of RPA for Porcine enterovirus in 2.5% agarose gel electrophoresis using different primer pair combinations

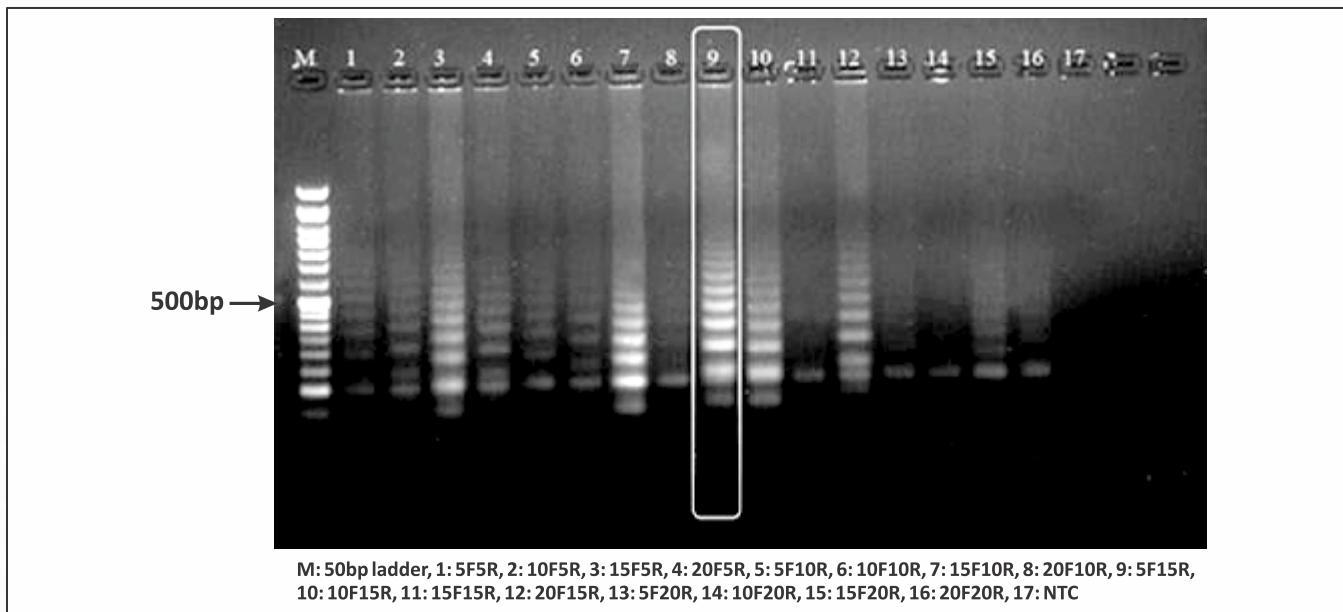


Fig. 2. Optimization of PSR conditions for Porcine Enterovirus

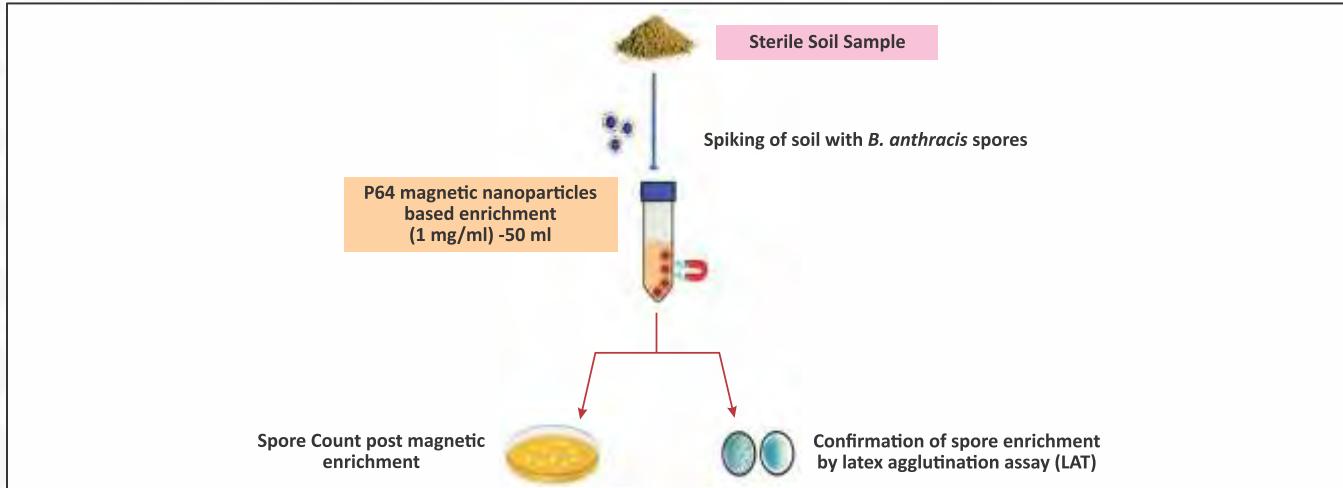


Fig. 3. Schematics for P-64 magnetic nanoparticles based enrichment of *B. anthracis* spores

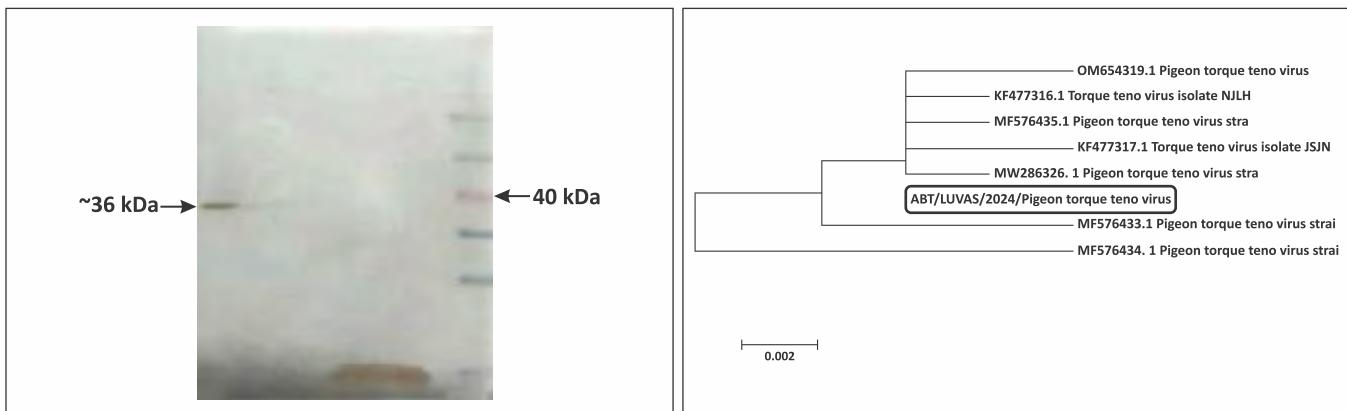


Fig.4. Recombinant bovine HY antigen protein has been expressed in *E. coli*

Fig.5. Phylogenetic analysis of obtained sequence of Pigeon torque teno virus

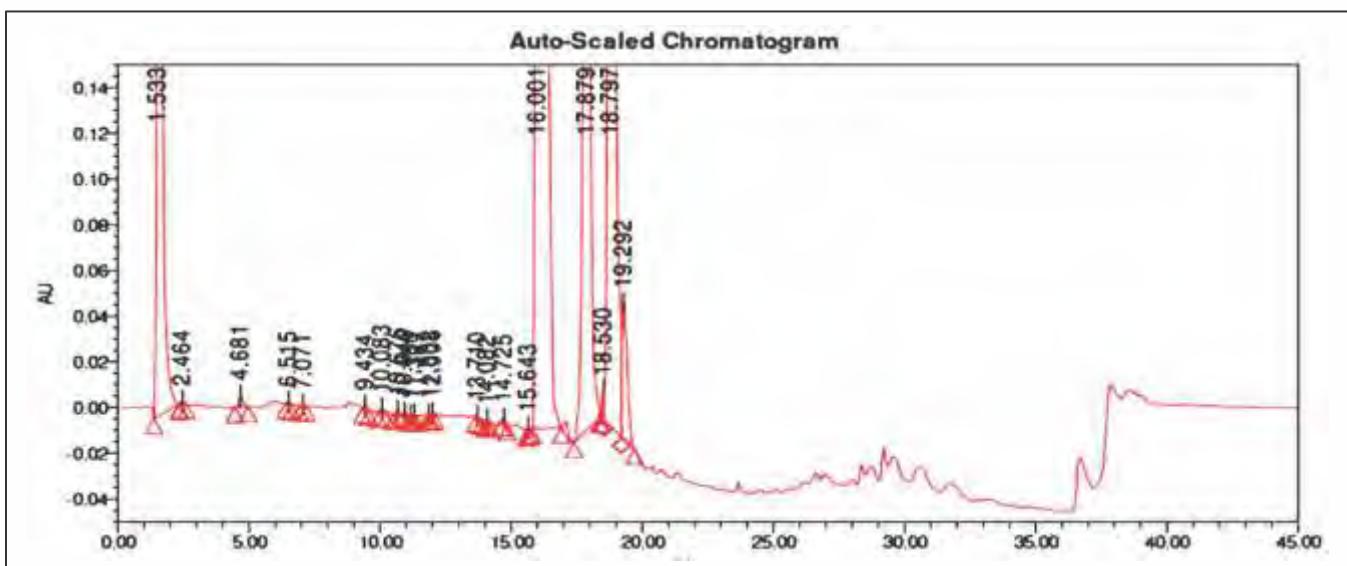


Fig.6. Chromatogram of pregnant animals saliva showing differentiating proteins

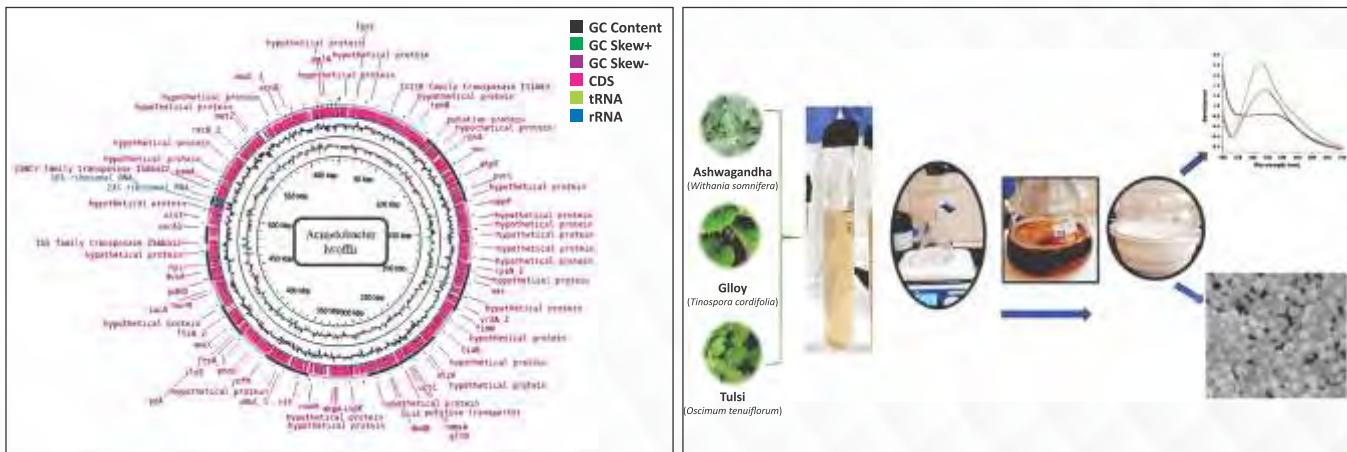


Fig.7. The Map Tab of obtained genome of *Acinetobacter iwoffii*

Fig.8. Steps involved in Green synthesis of AgNPs



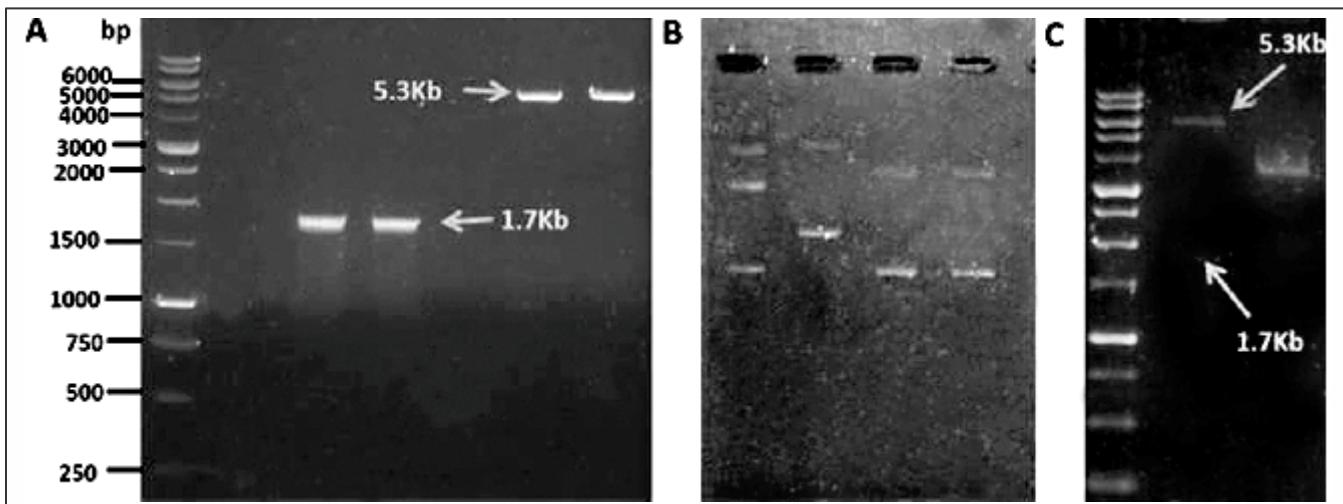


Fig.9. Cloning of NDV HN gene. (A) Restriction Digestion of insert and Vector resolved in 1% agarose gel. Lane 1: DNA ladder, lane 3&4: insert double digested (Ncol-NotI) PCR product and lane 6&7: linearized vector pET 28a. (B) Four colonies screened after transformation of ligated product, Lane # 2 showing retardation compared to vector in Lane#1. (C) Confirmation of cloning: Lane # 2 and #3 were double digested to confirm cloning.

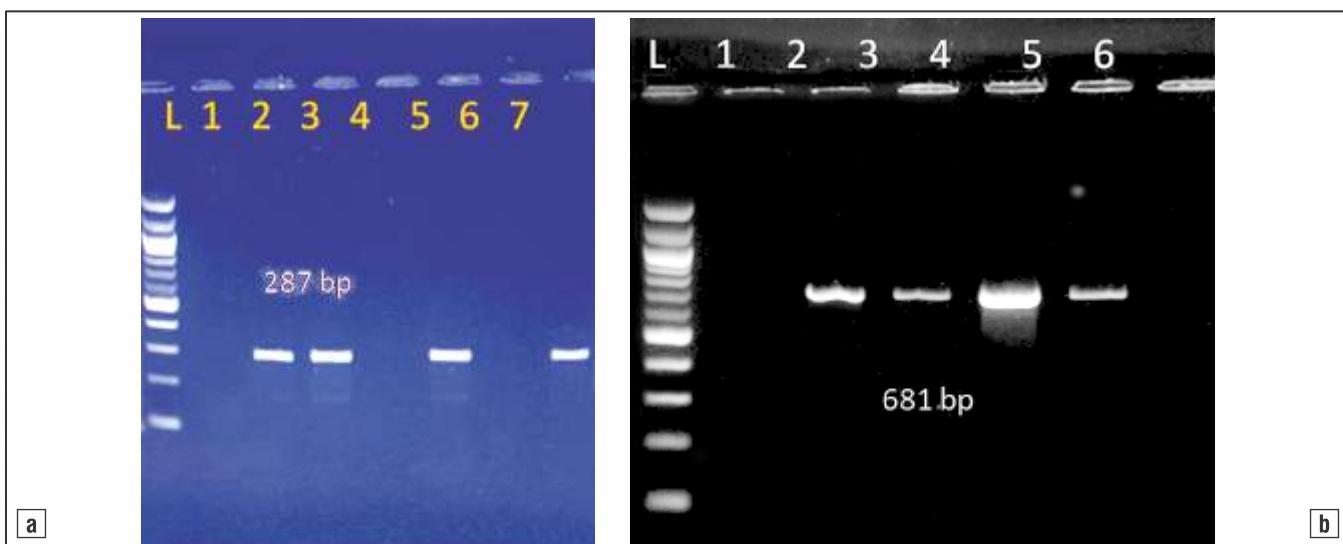


Fig.10. a) Agarose gel electrophoresis of PCR product L: Ladder- 100bp 1,2,3,4 lane-positive CD/N. b) Agarose gel electrophoresis of PCR product L: Ladder - 100bp 1,2,3,4 lane-positive CPV/2ab

## 2. Animal Genetics and Breeding

### Cattle

- Overall lactation yield in Hardhenu, Sahiwal and Haryana cows was 4020.16 kg (288 days), 2170.64 kg (248 days) and 1600.53 kg (230 days), respectively.
- Average lactation yield in Hardhenu, Sahiwal and Haryana cows (mature lactation, 4<sup>th</sup> and above) was 4587.90 kg (287 days), 2426.90 kg (257 days) and 1820.47 kg (262 days), respectively.

- Overall wet average of Hardhenu, Sahiwal and Haryana cows was 11.50, 8.18 and 6.80 Kg/day, respectively.
- Average calving interval in Hardhenu crossbred, Sahiwal and Haryana cows was 435, 443.89 and 456.75 days, respectively.
- Total fifty-seven Hardhenu, forty Sahiwal and two Haryana cattle were sold/auctioned to the farmers.

### Sheep

- Average six-month body weights were observed as 20.65 and 19.74 kg in Harnali and Munjal lambs,



respectively.

- The survivability of the flock was 96.95 percent during period of the report.
- The annual averages of greasy fleece yield in Harnali and Munjal sheep were 1.98 kg and 2.21 kg, respectively.
- One hundred fourteen animals were sold to sheep farmers for genetic improvement of their flocks.

#### Goat

- Average six-month body weights were recorded as  $18.91 \pm 0.62$  and  $19.22 \pm 0.86$  kg in Beetal and Jakhrana kids, respectively.
- The conception rate of artificial insemination in goats was reported as 31.11%
- Kidding rate in Beetal and Jakhrana goats was 1.51 and 1.40, respectively.
- Sixty-five Beetal and Twenty-one Jakhrana goats were sold to goat framers for genetic improvement of their flocks.

#### Poultry

- The layer strain pullets produced  $96.27 \pm 0.80$  eggs in 280 days with egg weight of  $52.01 \pm 0.22$  g.
- Broiler dam line attained  $2049.85 \pm 15.49$  and  $2610.99 \pm 17.38$  g weight at 20 and 40 weeks of age with an average egg production of  $93.38 \pm 0.86$  eggs. The average egg weight was  $55.12 \pm 0.30$  g.
- The body weights attained by Caribro-Dhanraja at 20 and 40 weeks of age were  $2579.31 \pm 18.99$  g and  $3384.15 \pm 32.12$  g, respectively.
- Broiler sire line (Dual purpose) attained  $1934.35 \pm 19.96$  g and  $2721.86 \pm 25.06$  g weight at 20 and 40 weeks of age with an average egg production of  $85.91 \pm 1.38$  eggs. The average egg weight was  $53.88 \pm 0.32$  g.
- Aseel and Kadaknath birds attained average egg production of 73 and 65 eggs with average egg weight of 46 and 43 g.
- During the year 2023-24, 7113 birds of desi, layer and broilers were disseminated to the farmers.

#### 3. Animal Nutrition

- Heat treatment of protein sources like Groundnut Cake, either alone or combined with Guar Korma, using malic acid led to a decrease in Rumen Degradable Protein (RDP) and an increase in Rumen Undegradable Protein (UDP), along with a reduction in rumen methane production. Feeding buffalo calves with this malic acid-treated Groundnut Cake or the combination with Guar Korma enhanced nutrient digestibility, nitrogen retention, and growth performance, while also significantly lowering methane emissions. Additionally, the populations of methanogenic and hyper-ammonia producing bacteria was reduced due to the malic acid treatment of the protein cake.
- Feeding growing buffalo calves with rice straw-based complete feed blocks offered nutritional value comparable to wheat straw complete feed blocks or total mixed rations (TMR) regarding palatability, intake, nutrient digestibility, and growth performance.
- Adding Shatavari to the diets of peri-parturient cows enhanced milk production and quality by promoting udder health. This supplementation also helped lowering the risk of sub-clinical mastitis, which poses a significant hidden cost to the dairy industry.
- Supplementing broiler diets with 1% chicory root powder and 0.01% multi-strain probiotics as a substitute for antibiotics enhanced growth performance, gut histomorphology, antioxidant enzyme activity, and beneficial gut microbial populations.
- Supplementing rabbit diets with *Chlorella vulgaris* enhanced growth performance and nutrient utilization, while adding *Spirulina plantensis* boosts hemoglobin levels and antioxidant activity.
- Incorporating 2000 mg/kg of betaine hydrochloride in the feed for broilers and layers improved growth and production performance, nutrient metabolizability, fatty acid profiles, and hematological-biochemical indices.





**Fig. 11. Rice Straw-based Complete Feed Block**

#### 4. Livestock Farm Complex

- The objectives of HSCSIT project were to evaluate the genetic diversity in Murrah buffaloes (N=100) based on variations in genomic regions of OLR1, SCD1, SAA2 and ADIPOQ genes using PCR-RFLP technique.

Intron 1 region (516bp) of SAA2 gene, 977 bp fragment of promoter region of ADIPOQ gene, two regions of OLR1 and SCD1 genes i.e. 146bp and 385bp fragment of 3'UTR and exon 1 of OLR1 gene and 400bp and 752bp fragment of exon 5 and exon 1 of SCD1 gene, respectively were studied. Subsequently, monomorphic patterns were revealed for SAA2, OLR1 and exon 5 region of SCD1 gene. The promoter region of the ADIPOQ gene and exon 1 region of SCD1 gene revealed polymorphism.

It was concluded that nucleotide changes at different locations in Murrah buffaloes as compared to *Bos taurus* can be used as selection signatures in Murrah buffaloes and association of identified novel SNPs with production and reproduction traits in large sample size needs to be explored.

- The objectives of DST project were to evaluate the



**Fig. 12. Blood collection of pigs in field conditions under DST Project**

genetic diversity in Large White Yorkshire pigs (N=150) based on variations in genomic regions of EGF, AHR, EXOC4, IGFBP-2 and IGFBP-3 genes using PCR-RFLP technique (Fig. 12-13).

A 532bp fragment of intron 3 of EGF gene and 427bp fragment of exon 11 of AHR gene showed monomorphic pattern indicating the absence of genetic variation at these loci whereas PCR product of 640bp size of the exon 1 region of EXOC4 gene, 245bp fragment in intron 2 of IGFBP-2 and 443bp fragment in intron 4 of IGFBP-3 gene revealed polymorphism. In conclusion, favoured genotypes of considered genes may be propagated further in Large White Yorkshire pigs through breeding programmes.

- Under RKVY Project, Piggery unit was established in the Department of Livestock Farm Complex (Fig. 14-15). Training to pig farmers was also organised.
- In a study on behaviour of Sahiwal and Haryana cattle, it was observed that the average time spent during concentrate feeding by Haryana and Sahiwal cows was higher in winter compared to summer whereas



Fig. 14. Established piggery unit under RKVY project

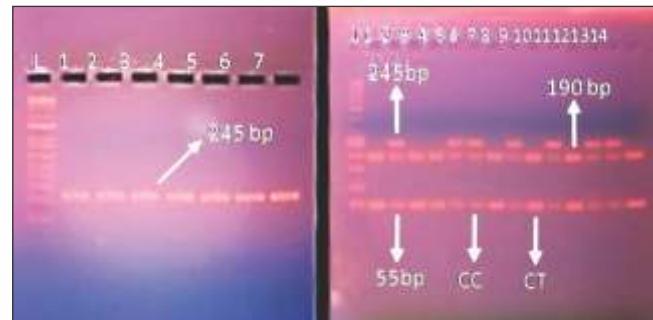


Fig. 13. PCR amplified and PCR-RFLP (Mspl) product of intron 2 region of IGFBP-2

time spent in watering was higher in summer. The position changed by Sahiwal and Haryana cows during feeding was more in summer compared to winter.

Butting within breed and between breed was higher in winter compared to summer. Urination and defecation were higher in winter but non-significant.



Fig. 15. Glimpses of inauguration of piggery unit



## 5. Livestock Production Management

- *Moringa oleifera* leaf meal (MOLM) supplementation in Murrah buffalo heifers (n=18) showed a significant effect on growth traits viz. chest girth and abdominal girths in both treatment groups fed 30 g and 60 g MOLM/day/animal.
- MOLM supplementation in Murrah buffalo heifers (n=18) showed improved total protein concentration (g/dl) and albumin in blood serum were significantly ( $P<0.05$ ) by increasing MOLM @ 30 g and 60 g/ animal/day in concentrate mixture in the ration of Murrah buffalo heifers at 6<sup>th</sup> month of experimental period.
- 10% and 15% cottonseed in the concentrate diet of lactating Murrah buffaloes under early, mid and late stage of lactation had a significant role in increasing milk fat, milk protein and total milk solids percentage in comparison to concentrate diet without cottonseed. Also, feed cost/ kg 6% FCM milk/ animal (In Rs.) for 10% and 15% cottonseed fed groups in comparison to control group (concentrate diet without cottonseed) advocates feeding of cottonseed only during early and mid-stages of lactation in Murrah buffaloes (n=54).
- Infrared thermography can be utilized as a promising methodology for assessing of udder health in *Capra hircus* as a rise in the surface temperature was noticed in affected left and right quarters of the udder; however, teat temperature was not a reliable measure for mastitis detection in goats (n=50).
- Hardhenu cows (n=18) in the medium BCS group (BCS-M) demonstrated superior performance in terms of production and reproduction traits.

## 6. Livestock Products Technology

- Milk candies with very good overall acceptability and natural sweetness, high protein, mineral and phenolic content and high DPPH activity were prepared by incorporating raw mango fruit and jawa plum individually. (Fig.16a,b).
- Garlic flavoured chicken meat chips had significantly higher overall acceptability scores in comparison to

control, mint and tomato flavoured chips. The developed chips with different flavours had similar proximate composition, pH values and texture in comparison to control chips. (Fig.16c).

- Dried apple pomace and dried carrot pomace incorporated patties had significantly higher crude fibre content as compared to control patties.
- Chicken meat chips with very good sensory scores can be developed by incorporating sorghum flour, finger millet flour and pearl millet flour individually at 3%, 6% and 9% levels, respectively to chicken meat. (Fig.16d).
- The incorporation of millet flours resulted in better emulsion stability and water holding capacity of the raw emulsion. Millet treated chips were micro-biologically safe and organoleptically acceptable up to 60<sup>th</sup> day of storage at room temperature.
- Chicken meat rolls with very good sensory scores and higher cooking yield can be developed by incorporating 9% pearl millet flour, 6% foxtail millet flour or a combination of 5% pearl millet flour and 3% foxtail millet flour. (Fig.16e).

## 7. Veterinary Anatomy

### Histoenzymological, ultrastructural and immuno-histochemical studies on the thymus of pig (Fig. 17-18)

- The lymphocytes were more in number and dense in cortical region.
- The cell organelles were well demarcated in large lymphocytes in medulla of thymus.

### Histoenzymological, ultrastructural and immuno-histochemical studies on the thymus of goat (Fig. 19-20)

- The cortex contained predominant lymphocytic population of small and medium size.
- The cortex was mitotically active zone showing mitotic active lymphocytes.

### Histoenzymological, ultrastructural and immunohistochemical studies on the thymus of buffalo (Fig. 21-22)

- The thymic cortex was having different stages of thymocytes.
- The medullary zone was having sparsely distributed





(a) Jawa plum milk candies



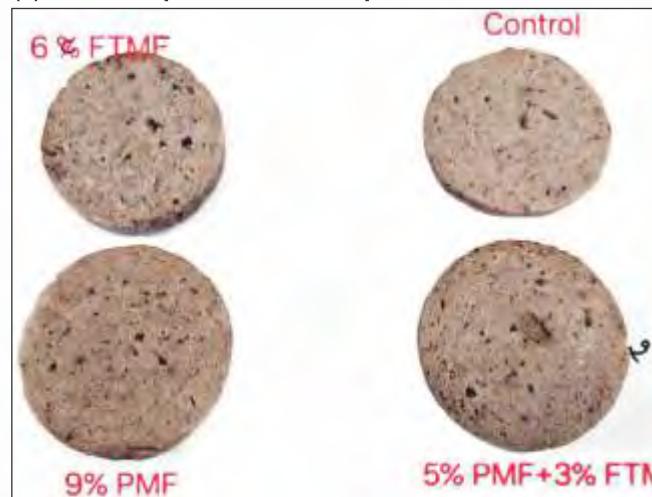
(b) Raw mango milk candies



(c) Garlic flavoured chicken chips



(d) Millet incorporated chicken chips



(e) Millet incorporated chicken rolls

**Fig. 16. Milk candies, chicken chips and chicken rolls prepared by department**

thymocytes with epithelial cells.

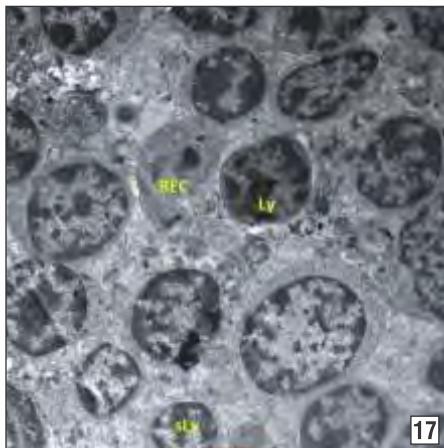
#### 8. Veterinary and Animal Husbandry Extension Education

An assessment of livelihood security and impact on well-being of rural women practicing dairy farming in state of Haryana was carried out.

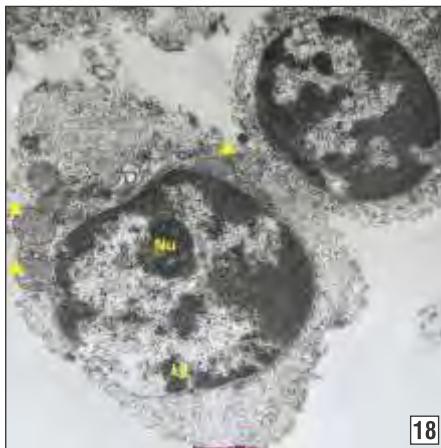
- In terms of livelihood security, milk and milk products

made a significant contribution to respondents' Food Security, with a mean percentage score of 74.45%. But in terms of economic security, it was opined that dairy animal keeping contributed in a limited way with relatively lower annual income (up to Rs. 50,000).

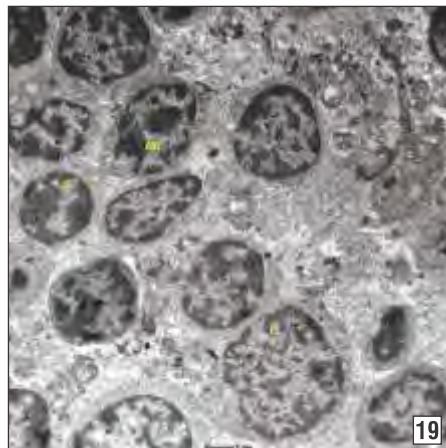
- Nearly half of the respondents (45%) opined that



17



18

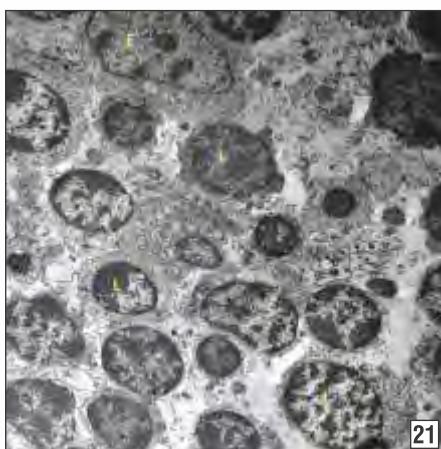


19

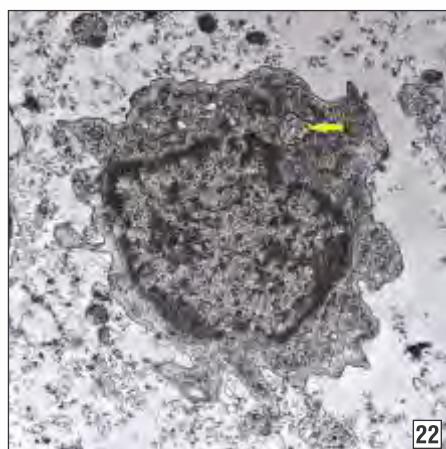
Fig. 17. Photomicrograph of thymus of pig showing different cells in cortex X01 $\mu$ m; Fig. 18. Photomicrograph of thymus of pig showing the lymphocyte with cellular details. X500nm; Fig. 19. Photomicrograph of thymus of goat showing mitotic lymphocytes in cortex X02 $\mu$ m



20



21



22

Fig. 20. Photomicrograph of thymus of goat showing the Mast with cellular details. X500nm; Fig. 21. Photomicrograph of thymus of buffalo showing different cell population in the cortex. X02 $\mu$ m; Fig. 22. Photomicrograph of thymus of buffalo showing macrophage. X500nm

their accommodation became somewhat unsuitable due to animal keeping, with the perception that it adversely affected the cleanliness of their homes.

- A significant majority (97.2%) agreed that keeping dairy animals improved their social relations outside of their immediate family.
- In case well-being, respondents' scores were on the higher side in the case of life, bodily health, affiliation, and lower in the case of emotions, practical reasons, etc.
- Major constraints perceived were high cost of animals and their feeds, poor availability of dry and green fodder. On the other hand, constraints like difficulty to store milk, lack of loan facility, clean ponds and non-remunerative price were ranked lower.

#### A study on ethical orientation of animal scientists and veterinarians towards animal welfare was carried out.

- The average contractarian orientation scores of 255 respondents towards animal welfare were  $81.47 \pm 9.95$  (mean  $\pm$  SD). When categorized a large majority of respondents were moderately (48.63%) to highly (45.49%) inclined towards contractarian orientation as compared to other orientations. It is hypothesized that the respondents were deriving their opinion on such an ethical value which is closer to contractarian idea and has imprints of both Utilitarian and Animal rightist position also.
- Animal rightist orientation of the respondents was  $63.43 \pm 10.22$  indicating moderate position. Further, around one third of respondents (37.25%) exhibited lesser inclination towards this orientation. Also,



- those with strongly favourable leanings (9.41%) were in minority.
- Pet keeping experience significantly influenced orientation towards animal rights.
- Belief in animal mind also affected the orientation leaning of respondents with lower scores being associated with utilitarian and conversely higher scores facilitating Rightist view.
- As the research experience, service experience and professional educational qualifications increased, respondents' opinion shifted from Rightist to Utilitarian orientation.

**Pet owners' ethical orientation and attitude towards animals and their welfare in Haryana was studied.**

- The four dimensions of animal ethics orientation were correlated with each other. Animal rights dimension was negatively correlated with anthropocentrism ( $r = -0.102$ ), animal protection ( $r = -0.317$ ) and lay utilitarianism ( $r = -0.075$ ). Anthropocentrism, animal protection and lay utilitarianism were positively correlated with each other.
- The correlation coefficient revealed that out of the eleven independent variables selected age, vegetarianism (dietary choices) and animal empathy score exhibited significant relationship across the four dimensions of animal ethics orientation.
- Respondents' dietary choices were linked to differences in their attitudes toward animal rights and anthropocentrism. Lacto-vegetarians showed the highest support for animal rights compared to pollo-vegetarians and flexitarians. Flexitarians tended to have higher scores in anthropocentrism compared to others.
- Comparison across different BAM score categories suggests that in lay utilitarian dimension, respondents with low BAM score ( $10.06 \pm 0.88$ ) tend to have significantly higher mean scores than those with high BAM score ( $7.36 \pm 1.15$ ). Similarly, comparison across different animal empathy score categories showed that those with high levels of empathy tend to have lower anthropocentrism and exhibited lower lay utilitarianism.

## 9. Veterinary Clinical Complex

- This year, a total of 14,552 cases were registered at VCC, LUVAS, Hisar showing a significant increase of 13.70 % in the cases than previous year. Out of these cases, 10,563 (72.58%) cases were reported in medicine section followed by surgery section 3143 (21.6%) and gynaecological section 846 (5.81%). With the income of Rs. 70,67,410 (in academic year 2023-24), VCC is growing income wise with 19.9% compounded annual growth rate from period 2013-14 to 2023-24 (Fig. 23-25).
- Blood transfusion in small dogs or cats is a viable solution for treating life threatening anaemia. Due to a lack of information and motivation among pet owners, as well as a general phobia of canine blood donation, there are currently few voluntary donors in the pet and farm animal practice. As a result, blood donation is often performed using donors that are organised by pet parents or farmers.
- Confirmatory diagnosis of Rabies in large animals and canines especially those showing nervous signs should be done on priority basis even if there is no history of dog bite.
- A total of 14,862/29,464 registered samples/parameters were processed and analysed in the Veterinary Diagnostic Laboratory of Veterinary Clinical Complex during 2023-24. Majority of the samples were blood samples (8,164) followed by biochemical (4,750/19,352), faecal (814), urine (805), FNAC (113), skin scrapings (89), ruminal fluid (65) and vaginal cytology (35) samples. Out of total FNAC /impression smear (163) cases, common findings observed were of inflammatory reactions (62), TVT (23), and round cell tumors or other tumors (22) cases.
- A total 745 skin cases were examined in dermatology section, major skin diseases diagnosed were generalized dermatitis/allergic dermatitis (286), bacterial dermatitis (115), acariasis (179), flea allergic dermatitis (44), otitis (57), pododermatitis (20), canine atopic dermatitis (25) and fungal infection (19). Out of total 78 samples tested for skin scrapping, demodex (11), sarcoptic (3) and fungal spores (14) were confirmed.



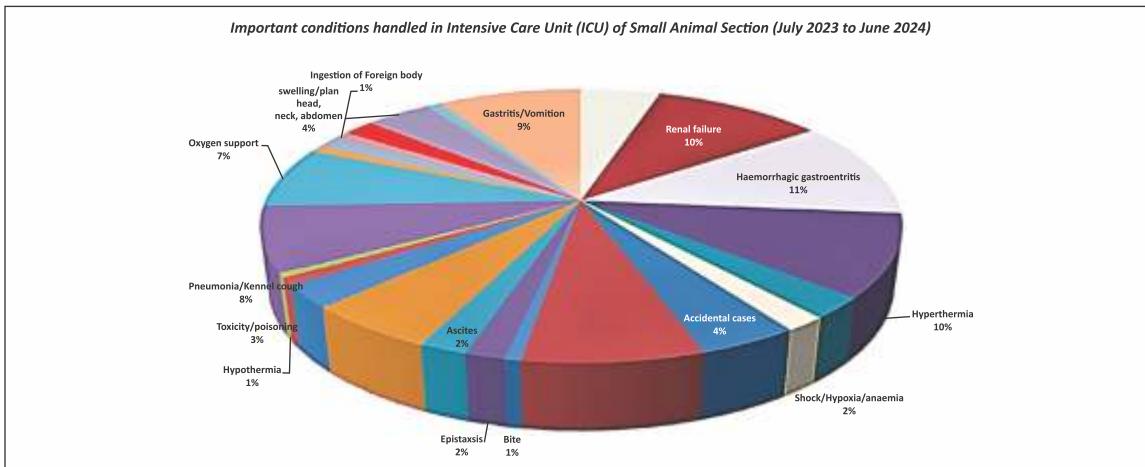


Fig. 23. Important clinical conditions handled in ICU of small animal section

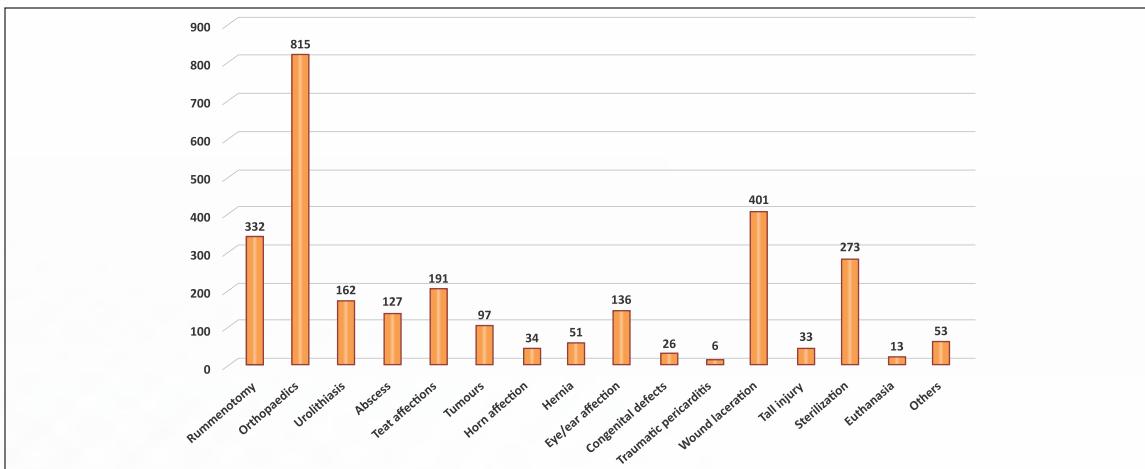


Fig. 24. Number of various conditions treated in Surgery section during 2023-24

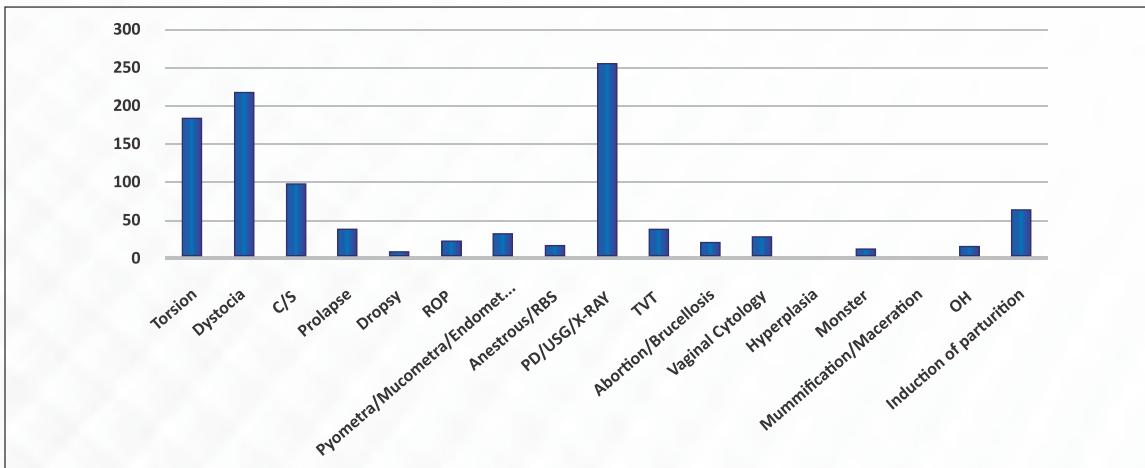


Fig. 25. Clinical conditions reported in gynaecological section of VCC

## 10. Veterinary Gynaecology and Obstetrics

- The exogenous melatonin treatment in non-lactating Sahiwal cows during summer reduced the effect of

heat stress, increased the blastocyst development rate by increasing the activity of antioxidant enzymes, as well as mRNA expression level of anti-oxidative



genes.

- Blastocyst development competence reduced, if follicle size of >20 mm is present on either of the ovary during OPU. So, aspiration of follicle for the *in vitro* embryo production in buffalo should be avoided in the presence of follicle size of >20 mm.
- Recovery rate from sub-clinical endometritis in buffaloes following Ozone and Cloprostenol therapy was similar (68%), whereas the cost of treatment in Ozone and Cloprostenol group was Rs. 35/- and 175-230/-, respectively. Therefore, Ozone therapy is more cost-effective as compared to Cloprostenol.

## 11. Veterinary Medicine

- The most preferable six animal welfare indicators observed in dairy setups were ectoparasitism, skin lesions/integument alterations, general temperament, avoidance distance, alkaline phosphatase, and serum amyloid A.
- Urine protein to creatinine (UPC) ratio proved to be more reliable in estimating proteinuria as compared to urine dipstick tests. UPC >0.25 could serve as an optimal cut-off for distinguishing between healthy bovines and those with renal disease, with a specificity of 100% and a sensitivity of 59.5%.
- Thirteen serotypes of *E. coli* were identified from UTI affected bovines, with the most encountered serogroup being O156 (23.40%). Out of the 47 *E. coli* isolates of UTI in bovines, 35 exhibited extreme drug resistance (XDR), 4 demonstrated multi-drug resistance (MDR) and 1 isolate displayed pan-drug resistance (PDR), raising concerns regarding emergence of multi-drug resistance.
- Therapeutic evaluation of urinary tract infections in bovines revealed parenteral antibiotic therapy including Amoxicillin/sulbactum @ 12 mg per/kg BW IM bid x 7d or Ceftiofur @ 2.2mg/kg b.wt. IM for 7 days or Gentamicin @ 4-6mg/kg b.wt. IM OD for 7 days along with flushing of urinary bladder with dilute liquid betadine (2.5%) and metronidazole (100 mg in 10 ml distilled water) and ammonium chloride orally @ 0.2 g/kg body to be highly successful therapeutics.

- Conventional PCR was found to be more sensitive than microscopy for detecting *Babesia* infection in dogs. Overall, per cent positivity for *B. vogeli* and *B. gibsoni* by microscopy and conventional PCR was found to be 10.64% (23/216) and 22.22% (48/216), and 1.86% (4/216) and 5.56% (12/216), respectively.
- Phylogenetic analysis based on the 18S rRNA and *cyt b* genes of *B. vogeli* revealed the presence of two genotypes and sub-clades, respectively. Phylogenetic analysis based on the *B. gibsoni* thrombospondin-related adhesive protein (*BgTRAP*) gene suggested the existence of three genotypes, with the presence of two genotypes in Haryana.
- The *B. vogeli* and *B. gibsoni* infections in dogs can be successfully treated with imidocarb dipropionate (@ 6.6 mg/kg SC), and a combination of diminazene aceturate (@ 3.5 mg/kg IM), imidocarb dipropionate (@ 6.6 mg/kg SC) and clindamycin (@ 30 mg/kg PO q12h X 45 days), respectively.
- Trans-tracheal wash was found to be safe diagnostic technique to examine the lower respiratory tract pathogens in buffaloes with 16.2% sample retrieval of initial fluid volume instilled.
- Survey of blood typing in dog population (n=150) of Haryana depicted overall occurrence of blood group DEA 1 system to be 96.6%, out of which 57.3% were of DEA 1.1 type, 39.3% were DEA 1.2 type.
- Probe based (TaqMan) and dye based (SYBR Green) Real time PCR assays for diagnosis of trypanosomosis in buffaloes were developed, standardized and optimized and was found 1000 times more sensitive than the conventional PCR assay for the diagnosis of *Trypanosoma evansi*.

## 12. Veterinary Microbiology

- ❖ **Haemorrhagic septicaemia (HS) sero-monitoring:** Using indirect HS-ELISA, protective antibody titers ( $\geq \log 101.80$ ) were measured in the serum of cattle and buffaloes (age groups 6-12, >12-24, and >24 months::5:4:1) from all 22 districts of Haryana against HS. (Fig. 26-27).

- **Rural cohorts:** Before LHDCP Round 5 (FMD +





HS combined vaccination Round 7, May-June 2023), 36.53% (627/1716) animals while one month after vaccination 74.35% (1276/1716) animals showed protective antibody titers.

- **Government-organized farms:** Overall, 71.09% (305/429) of Pre-vac samples were found protected and 84.67% (381/450) of one-month post-vac samples were found “Protected” ( $\geq 1.8 \log_{10}$ ).
- ❖ **Foot and mouth disease virus (FMDV) sero-monitoring in rural cohort:** Using Solid-phase competitive ELISA (SPCE), protective antibody titers ( $\geq \log_{10} 1.65$ ) were measured in cattle and buffaloes (age groups 6-12, 13-24, and  $>24$  months::5:4:1) from all 22 districts of Haryana.
  - **Haryana:** Before NADCP/LHDCP Round 5, 36.1% (620/1718), 31.8% (546/1718), and 37.7% (648/1718) of animals showed protective antibody titers which after one-month of vaccination increased to 75.6% (1298/1716), 63.9% (1098/1716), and 78.1% (1340/1716) against FMDV serotypes O, A, and Asia-1, respectively. (Fig. 28).
  - **Haryana:** Before NADCP/LHDCP Round 6 (FMD + HS combined vaccination Round 8, Jan.-Feb. 2024), 39.7% (434/1092), 40.2% (439/1092), and 45.5% (495/1092) of animals showed protective titers which after one-month of vaccination increased to 72.1% (787/1092), 72.8% (795/1092) and 77.7% (848/1092) against FMDV serotype O, A, and Asia-1,

respectively.

- **Delhi:** During 2023, under LHDCP, 44.0, 37.0, and 40.0% of animals (n=445) in pre-vac and 70.0, 64.0, and 67.0% in post-vaccination (n=378) exhibited protective antibody titers against FMDV serotype O, A, and Asia-1, respectively.

- ❖ **FMDV sero-monitoring in government-organized farms:** Overall, before FMDV vaccination 95.5% (848/888), 94.0% (835/888), and 95.0% (844/888) cattle and buffaloes (mostly adults) exhibited protective antibody titers while after one-month it increased to 99.7% (900/903), 99.7% (900/903) and 99.8% (901/903) against FMDV serotypes O, A, and Asia-1, respectively from government organized farms of Haryana (Semen Banks of Gurugram, Hisar, Yamunanagar; SCBP Sec-II, GLF Sec-I, ICAR-CIRB, ICAR-NDRI and LUVAS Animal Farms). Regular vaccination regimes, improved management conditions, proper vaccination storage and application, and good nutritional status of animals in these farms have led to a significant increase in protective antibody titers against FMDV.

- ❖ Seven FMD virus serotype O outbreaks were recorded from January to June 2024 (Fig. 29) from three districts viz. Bhiwani (1), Hisar (4) and Jind (2) in the clinical samples (13/14) collected from cattle, buffaloes, and goats when tested by sandwich ELISA and RT-multiplex PCR. (Fig. 29-30).

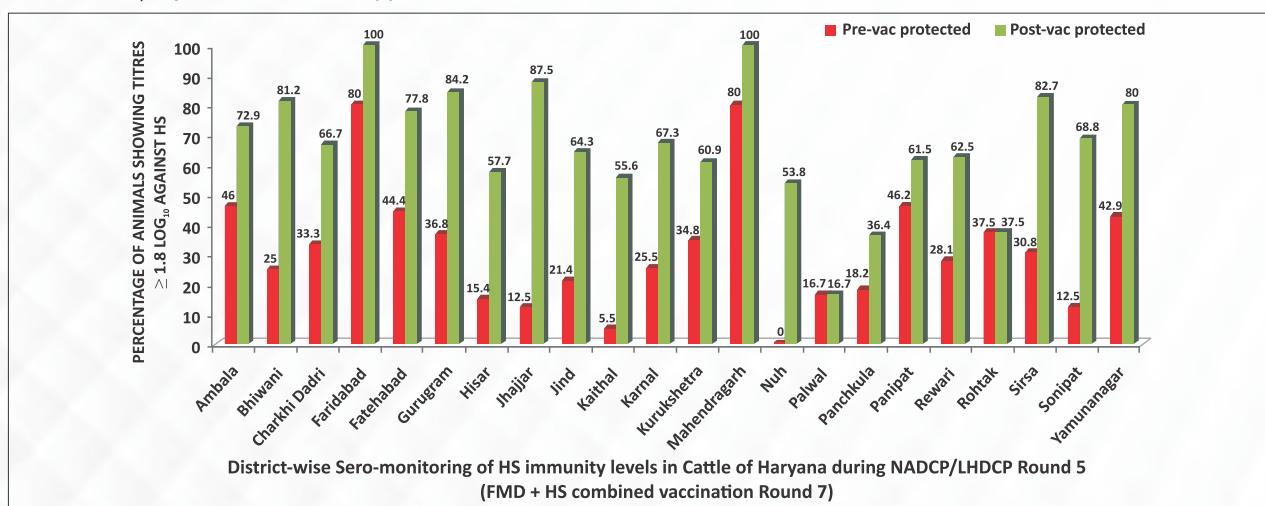


Fig. 26. Percentage of cattle showing protective antibody titres ( $\geq 1.8 \log_{10}$ ) against HS in pre- and post-vaccination samples of 22 districts of Haryana during NADCP/LHDCP Round 5 (FMD + HS combined vaccination Round 7)

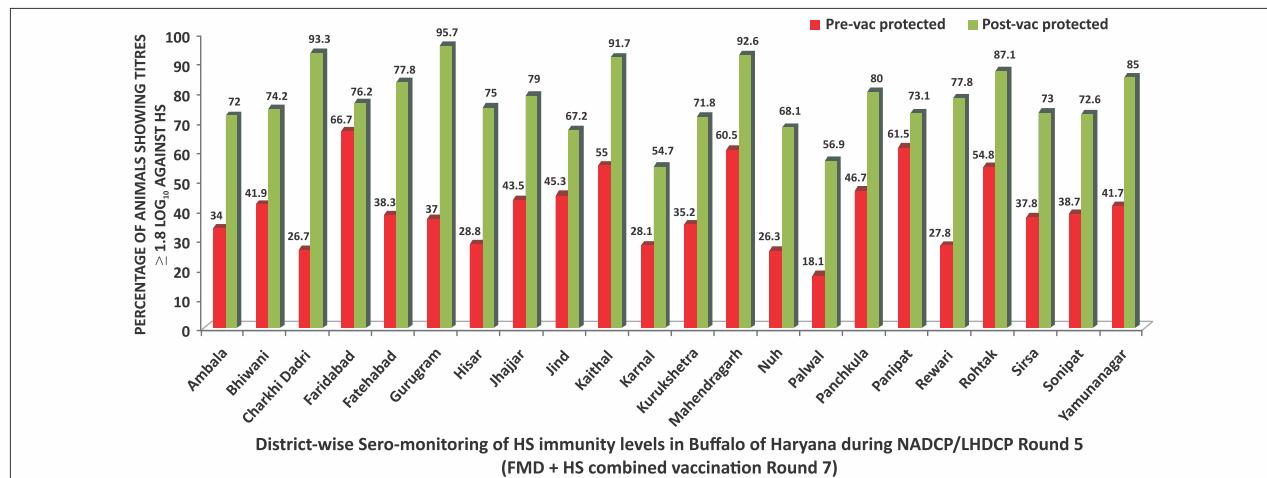


Fig. 27. Percentage of Buffalo showing protective antibody titres ( $\geq 1.8 \log_{10}$ ) against HS in pre- and post-vaccination samples of 22 districts of Haryana during NADCP/LHDCP Round 5 (FMD+HS combined vaccination Round 7)

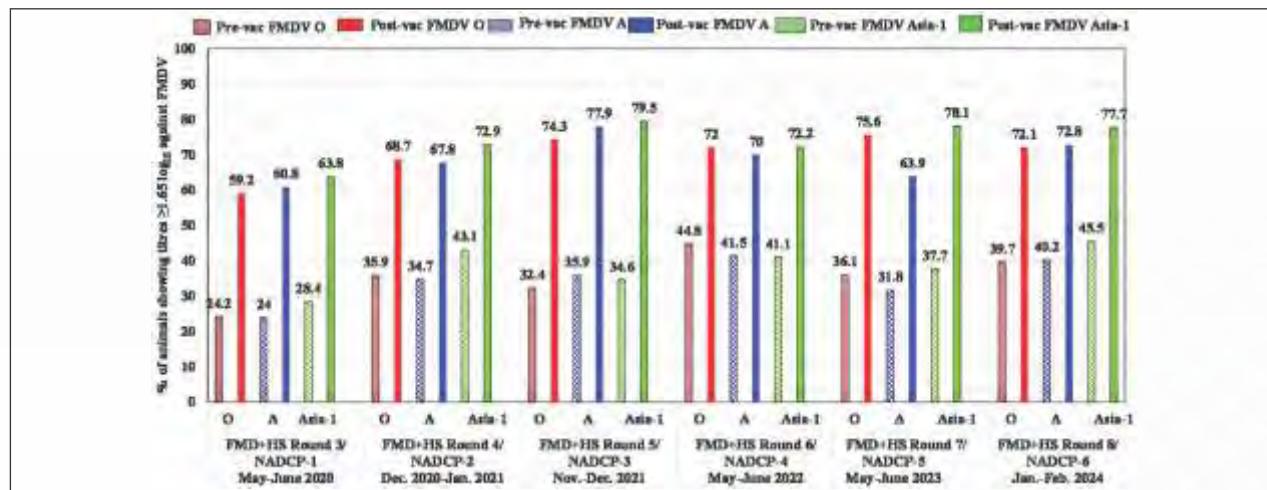


Fig. 28. Trend of FMD vaccine antibody response during NADCP/LHDCP Round 1-6 (FMD+HS combined vaccination Round 3-8) in cattle and buffaloes of Haryana

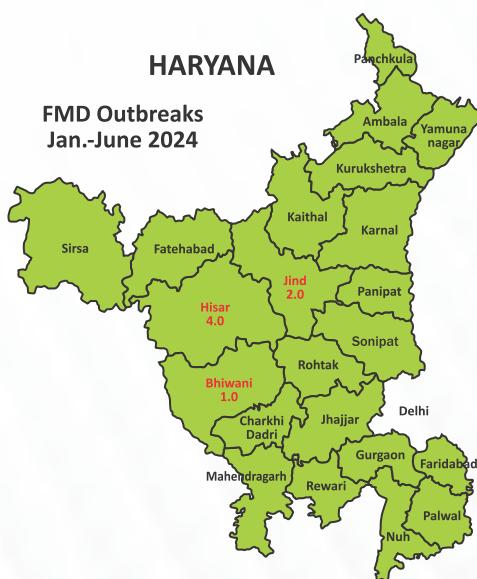


Fig. 29. FMD outbreaks in Haryana (Jan.-June, 2024)

- ❖ **FMDV sero-surveillance:** Non-structural protein (NSP) or DIVA positivity was found to be 3.9% (308/7808) in cattle and buffaloes using r3AB3 NSP DIVA ELISA from all 22 districts of Haryana during 2023 which is consistently less than 10% during the past 5 years indicating a decline in FMDV circulation in the state. The NSP positivity in Delhi was 9.6% (40/332). (Fig. 31).
- ❖ A total of 2406 serum samples of animals suspected of Trypanosomiasis were screened by monoclonal antibody based Latex agglutination test (TE-LAT) and 71.52% (1721/2406) were found positive for circulating *T. evansi* antigen.
- ❖ Nanobody (Nb) clone VHH-C6 was found to be

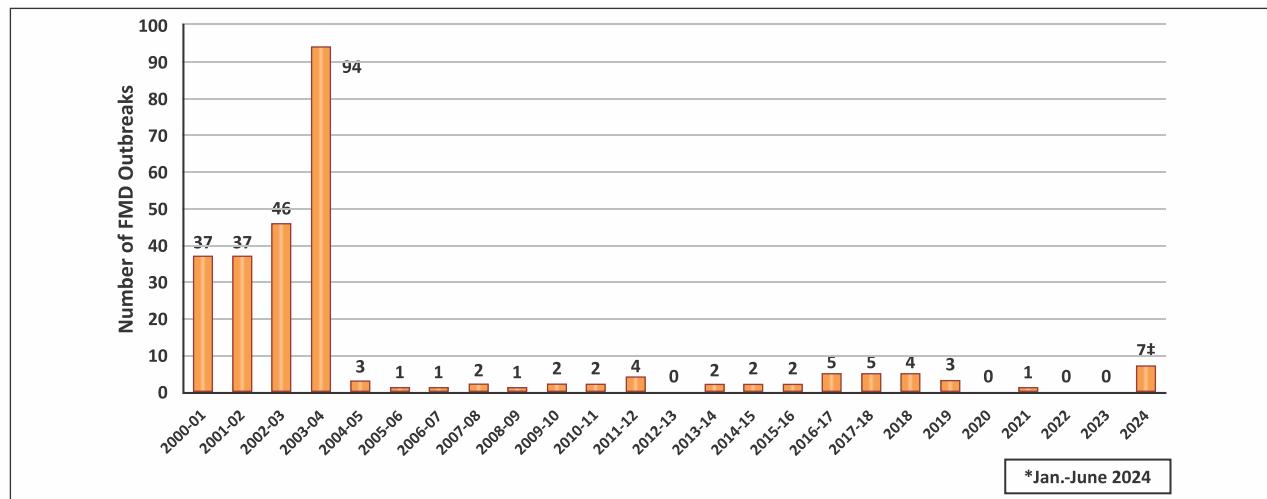


Fig. 30. Year-wise distribution of FMD outbreaks in Haryana (2000-2024)

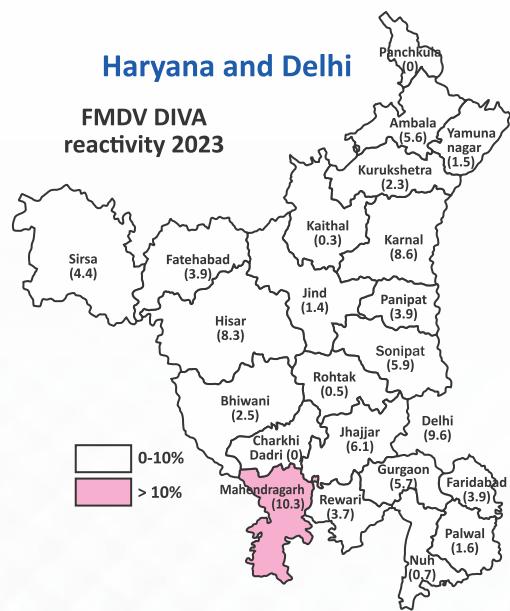


Fig. 31. District-wise FMDV sero-surveillance (DIVA reactivity) in cattle and buffaloes of Haryana and Delhi (2023)

specific for FMDV Asia-1 with high affinity by ELISA.

- ❖ The recombinant clone was confirmed by sequencing and will be used for generation of standard curve for development of real time PCR assay. This will be used for screening of faecal samples suspected for porcine Rotavirus.

### 13. Veterinary Parasitology

- The phylogenetic analysis of *Hyalomma anatolicum* collected from different districts of Haryana revealed the presence of a large monophyletic clade with the GenBank-archived sequences originating from India, Pakistan, China, Tajikistan, Iraq, Egypt, Turkey, and the UAE. (Fig. 37).
- The ethanolic extracts of *Cassia fistula* (bark, pod pulp, and flowers) were evaluated *in vitro* for their



Fig. 32. Registrar-cum-Director, DHRM, LUVAS along with Experts from ICAR-NIFMD, faculty of LUVAS and trainees from different states and UTs during the valedictory function of the Capacity building programme on probang sampling (25-27 July, 2023)



Fig. 33. Experts with participants while getting hands-on training for OPF collection from cattle and buffaloes in the field



Fig. 34. PI and Co-PI, Regional Research Centre on FMD, LUVAS, Hisar being felicitated by Dr. Raghavendra Bhatta, Hon'ble DDG (Animal Science), Dr. Ashok Kumar ADG (Animal Health), and Dr. R.P. Singh, Director, ICAR-NIFMD during 31<sup>st</sup> Annual Review Meeting at ICAR-NIFMD, Bhubaneswar (18-19 June 2024)



Fig. 35. Dean COVS, Dr. Gulshan Narang, HOD Vety. Microbiology, Dr. Rajesh along with participants and Course faculty of the 36<sup>th</sup> ICAR-CAFT in Veterinary Microbiology



Fig. 36. Worthy Vice-Chancellor, Prof. (Dr.) Vinod Kumar Verma, releasing the copyright acquisition (SW-18808/2024) for an innovative App “LUVAS FMD E-Loss Calculator” designed by the Scientists of the Department of Veterinary Microbiology

potential anti-tick activity against *Rhipicephalus microplus* larvae. The LC90 value recorded for the combination of the ethanolic extracts of the bark, flower, and pod pulp of *C. fistula* was 107.152 mg/mL, whereas the synthetic acaricide ivermectin had an LC90 value of 3467.37 mg/mL. Hence, the combination of all *C. fistula* extracts could serve as a potential substitute for the synthetic acaricide.

- Alcoholic extracts of *Curcuma longa* and *Zingiber officinale* were evaluated *in vitro* for their potential anti-tick activity against *Hyalomma anatomicum* tick larvae. The LC90 values of deltamethrin, ivermectin, and the ethanolic extracts of *Curcuma longa* and *Zingiber officinale* were 114.81, 2884.03, 1348.96 and 1862.09 ppm, respectively. The study showed that deltamethrin is effective against tick larvae, and also highlighted that herbal extracts could be used against ticks to avoid the excessive use of synthetic acaricides.
- Screening of wild rats (n=67) from the CCSHAU campus, Hisar, revealed haemprotozoan (*Trypanosoma lewisi*, *Hepatozoon* spp. and *Babesia microti*-like) infection and the post-mortem investigation showed metacestode (*Strobilocercus fasciolaris*) of *Taenia taeniformis*. The occurrence of *Trypanosoma lewisi*, *Hepatozoon* spp., and *Babesia microti*-like haemprotozoa was 19.4% (13/67), 14.9% (10/67) and 5.9% (4/67), respectively, upon blood smear examination and *Strobilocercus fasciolaris* in liver of

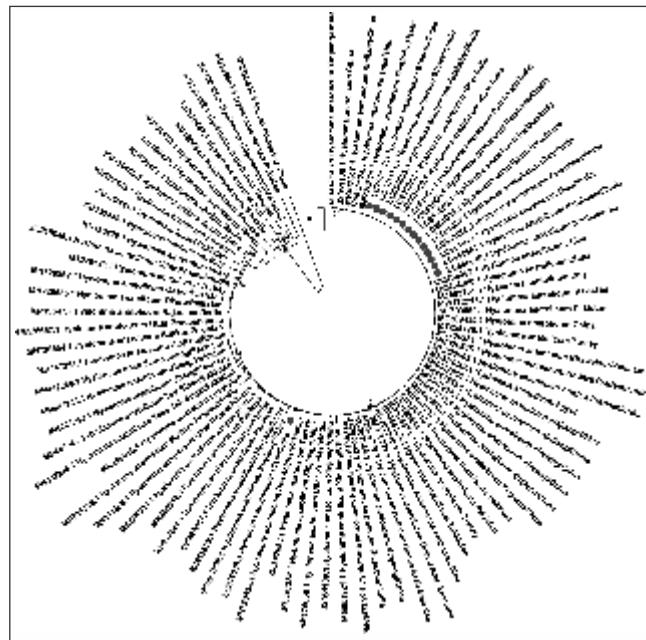
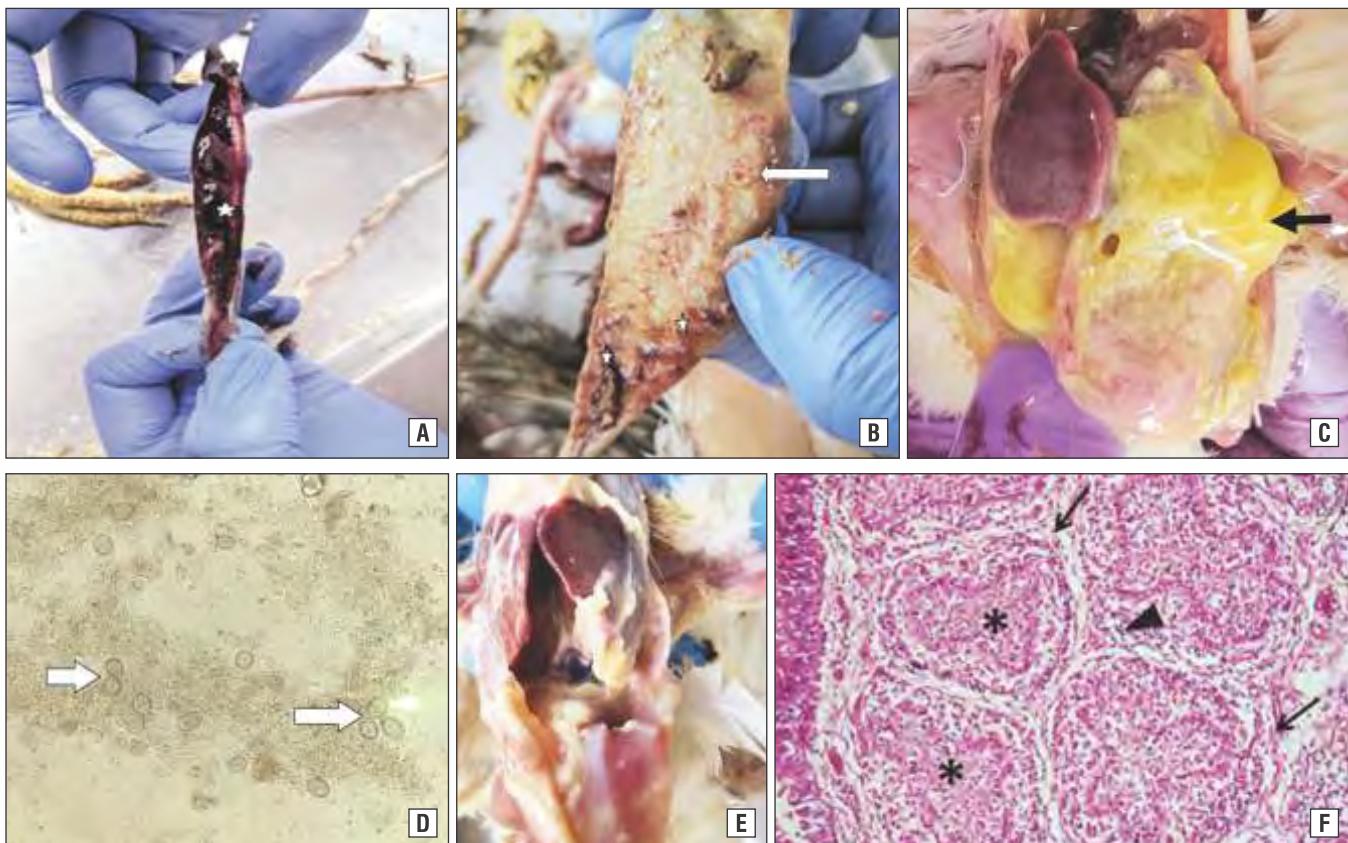


Fig. 37. A circular Maximum likelihood tree for *Hyalomma anatomicum* based on the partial mitochondrial 16S rRNA gene. The evolutionary distances were computed using the maximum composite likelihood method with Tamura-Nei model and are in the units of the number of base substitutions per site. Bootstrap values are indicated on each node. The bar represents 0.05 substitutions per site. *Musca domestica* (GQ396696) was used as an out-group species to root the tree.

23.8% (16/67) rats during post-mortem examination.

## 14. Veterinary Pathology

- Major conditions observed in 1280 poultry carcasses were coli septicemia along with rickets, omphalitis/yolk sac infection, enteritis, fatty liver/hemorrhagic syndrome, infectious bursal disease/IBD, visceral gout, hepatitis, intestinal coccidiosis and ascites (Fig. 38).
- Post-mortem examination of 140 bovines revealed mycotoxicosis, pneumonia (of different types), pneumo-enteritis, stillbirth/abortion, hepatitis along with nephritis, lymph skin disease and traumatic reticulo-peritonitis. Post-mortem examination of sheep and goat carcasses (16) revealed pneumonia and gastrointestinal tract affections viz. enteritis and gastro-enteritis.
- Foremost conditions observed in wild animals/birds (59) were traumatic shock due to injury/fracture, pneumonia and pneumo-enteritis. In Peacocks, monocrotophos poisoning and renal worms were seen.



**Fig. 38.** (A) Poultry carcass showing intestine mucosa having ulceration and hemorrhages (star), (B) Poultry liver showing perihepatitis with Oocysts (arrows), (C) Presence of thick fibrinous layer covering liver (arrow), (D) Poultry caecal content showing coccidian (arrow), (E) Poultry liver showing perihepatitis, (F) Presence of thick fibrinous infected with infectious bursal disease layer covering liver showing necrosis of lymphocytes in medullary lesions (asterisks), infiltration mixed type of inflammatory cells (arrow head) and fibrous connective tissue proliferation (arrow head). H&E  $\times 100$

- Tissue biopsy studies (53) revealed predominance of epithelial tumours followed by mesenchymal tumours in bovines and equines. In canines, mesenchymal tumour predominated followed by epithelial origin tumours, non-specific origin tumours and germ cell tumours.

## 15. Veterinary Pharmacology & Toxicology

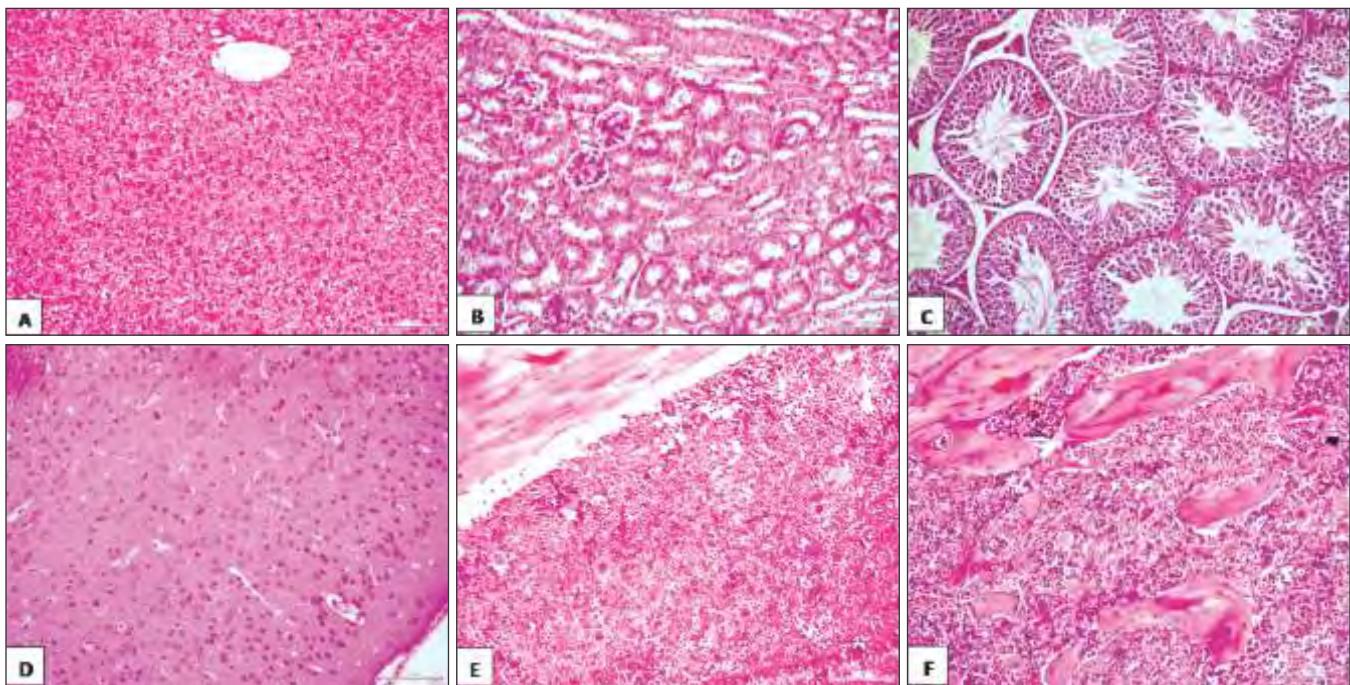
- Polyherbal (PH) formulation, prepared by mixing the 200 mg/ml solution of *Moringa oleifera* (Aqueous extract), *Psidium guajava* (Aquamethanolic extract), *Punica granatum* (Aqueous extract) and *Ocimum sanctum* (Aquaethanolic extract) each in the ratio 1:2:4:1, has no acute or delayed toxicity when administered at a dose of 2000 mg/kg b.wt. orally in Swiss albino male mice. (Fig. 39-41).
- Polyherbal formulation was safe in Swiss albino mice at dose levels of 100, 200 and 400 mg/kg b.wt. administered orally daily for 28 days and was

genoprotective in cyclophosphamide induced genotoxicity in Swiss albino mice at all three dose levels when administered orally daily for 28 days.

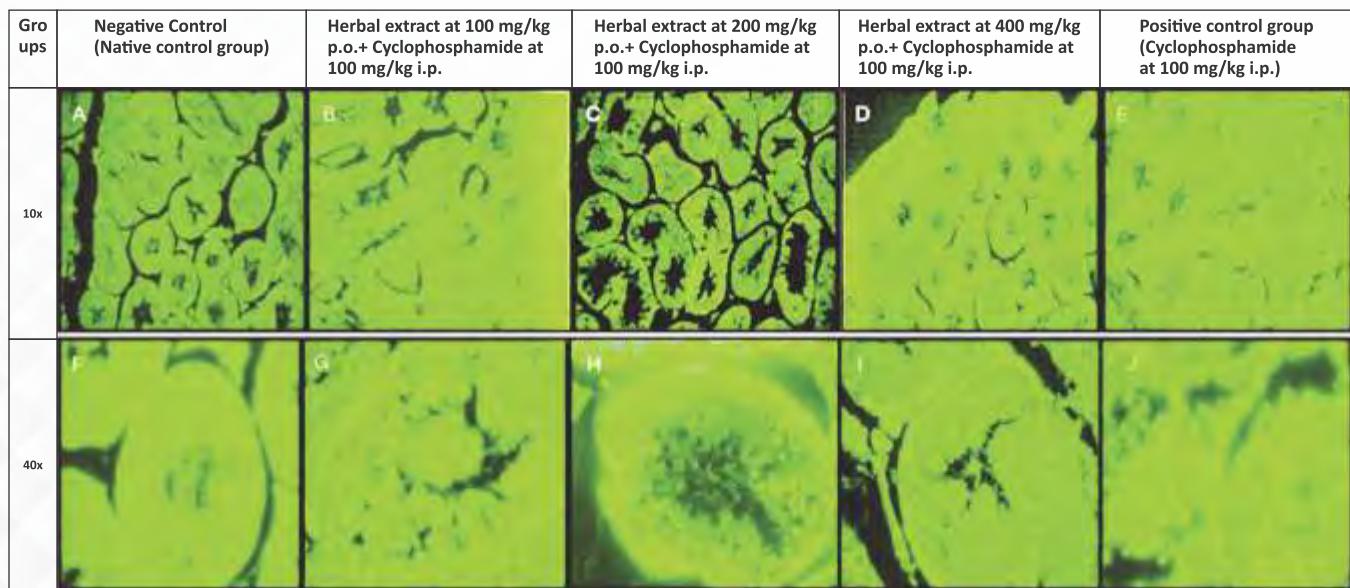
- Topical application of morin nanoparticles at a concentration of 0.1% promoted enhanced cutaneous wound healing in rats while its oral administration @ 15 mg/kg b.wt. resulted in notable gastric ulcer healing effects.
- Application of 0.1% morin nano gel topically resulted in significant anti-inflammatory effects in carrageenan -induced paw inflammation.

## 16. Veterinary Physiology and Biochemistry

- Significant increase in total volatile fatty acid and total nitrogen concentration has been observed after feeding *Emblica officinalis* + *Mentha piperata* mixture indicating improved rumen fermentation in buffalo calves.



**Fig. 39.** (A-F): Histological examination of liver, kidney, testes, brain and bone marrow tissue in Control & polyherbal treated groups displayed normal histological structure. **A:** Liver revealed distinct hepatic lobules, cords of hepatocytes were separated with sinusoids. Central vein and portal triad also appeared to be normal. **B:** Kidney revealed normal tubular and glomerular microstructure. Interstitial tissue appeared normal. **C:** Testes showed normal developmental stages of spermatogonial cells in seminiferous tubules. Interstitial tissue with Leydig cells appeared normal. **D:** Brain section revealed normal morphology of neurons and number of glial cells. No vascular changes observed in perivascular or perineuronal space. **E & F:** Bone marrow showed the normal and uniform architecture of periosteum, cavities, and trabeculae with abundant bone marrow cells.



**Fig. 40.** Immunofluorescence images for Gamma H2AX protein (a marker of Genotoxicity) in testis of mice treated with different treatments at different magnifications (A-E at 10X and F-J at 40X). Bright Green fluorescence indicates localisation of Gamma H2AX protein.

- Change in haemoglobin (Hb) and glucose levels can be indicator of THI related stress and may be candidate parameter(s) for sensor development.
- The initial study indicates that microwave treatment on maize and rice bran improved the quality of feed.
- Adoption of blue light in poultry sheds can be helpful in improved growth, behaviour and carcass traits as compared to current lighting practices.

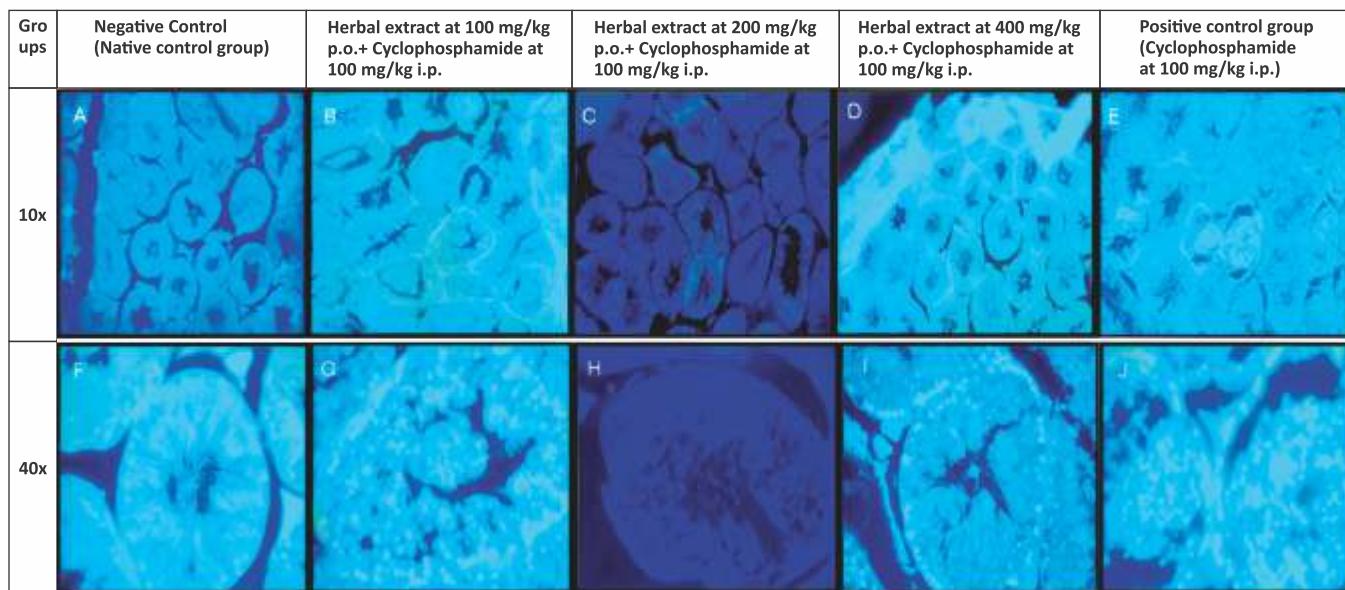


Fig. 41. Immunofluorescence images for Gamma H2AX protein (a marker of Genotoxicity) in testis of mice treated with different treatments at different magnifications (A-E at 10X and F-J at 40X). Bright blue fluorescence indicates localisation of Gamma H2AX protein.

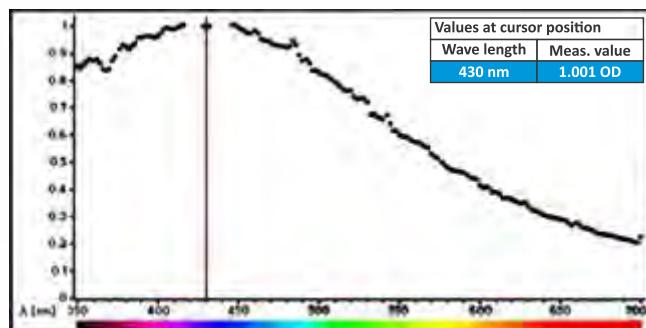


Fig. 42. UV-Vis spectroscopic analysis of biosynthesised Ag nanoparticles

- Silver nanoparticles can be successfully synthesized by a reduction method using *Syzygium aromaticum* (clove) bud extract. (Fig. 42).

Biosynthesized silver nanoparticles using alcoholic clove extract were found to possess enhanced antibacterial activity against the tested bacteria compared to those synthesized with aqueous clove extract.

## 17. Veterinary Public Health & Epidemiology

- A total of 78 outbreaks of different diseases were investigated in livestock. (Fig. 43).
- A total of 11 outbreaks were investigated in large ruminants with FMD remaining the predominant disease.
- In sheep and goats, 52 outbreaks of different diseases were investigated with PPR remaining the major disease. (Fig. 43).

- In pigs, 15 outbreaks of different diseases were investigated with African swine fever and classical swine fever as the leading diseases. (Fig. 44).
- Disease investigation work was carried out in 387 poultry flocks. Respiratory Disease Complex affected maximum number of flocks (131) during this period followed by mycotoxicosis (74) and *E. coli* infections (40).
- A total of 692 animals were tested for bovine tuberculosis (TB) and paratuberculosis (JD). Of these, 49 and 14 were reactors and doubtful, respectively for TB and 19 and 13 were reactors and doubtful, respectively for JD.
- A total of 16 suspected outbreaks of toxicity were investigated in sheep, purple swamp hen, buffalo, peacock, grouse, dove, cattle and goat.
- In two outbreaks among wild birds, gizzard contents were found to contain high concentration of monocrotophos pesticide.
- Sixty-two (49.21%) out of total of 126 poultry feed samples tested during the period were having aflatoxin below the permissible limit of 30 ppb.
- A total of 869 (45.5%) of 1910 faecal samples were positive for the presence of different parasites; 4988 (83.7%) of 5961 milk samples were positive for





**Foot and Mouth Disease:** Ulcerative lesion on gum and hyper salivation



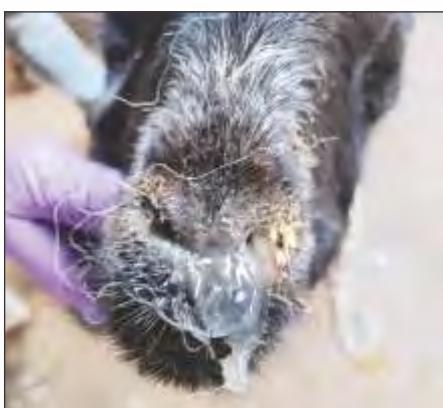
**Haemorrhagic Septicaemia:** Froth in trachea



Colonies of *Pasutereuella multocida* on blood agar



**Haemorrhagic Septicaemia:** Haemorrhages in spleen



**PPR in goat:** Nasal discharge



**PPR in goat:** Necrotic lesions in buccal cavity



**FMD in goat:** Ulcer on dental pad



**Contagious ecthyma:** Scabby lesion over lip



**African Swine Fever:** Cyanotic appearance of skin



**Swinepox:** Skin lesions in pig



**Classical Swine Fever:** Reddish appearance of skin



**Classical Swine Fever:** Petechial haemorrhages in kidneys

**Fig. 43. Various lesions observed in different diseases**

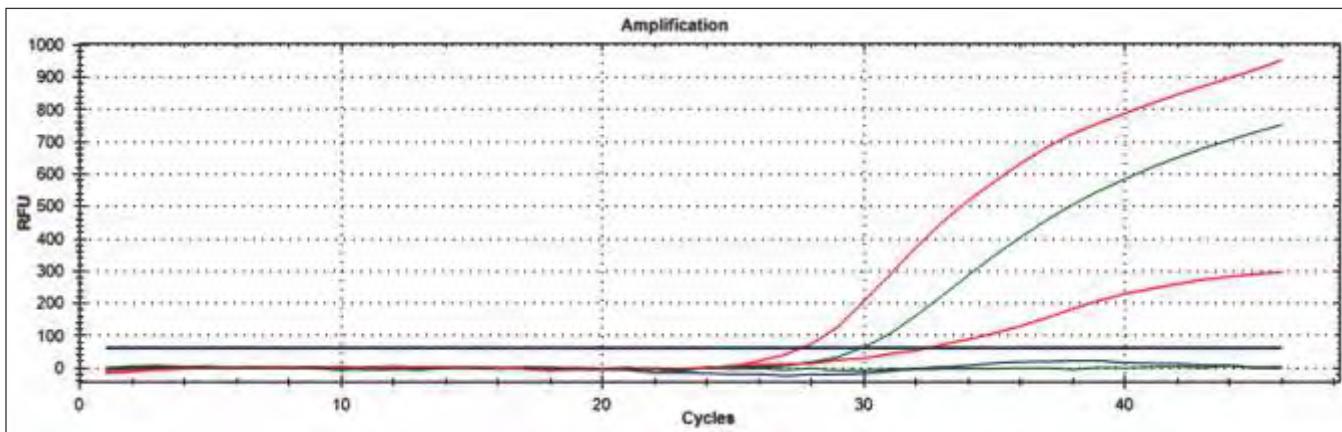


Fig. 44. Testing for ASFV: Amplification plot for TaqMan probe based Real-time Polymerase chain reaction (q-PCR) for the detection of ASFV in blood/nasal swab samples/tissue samples

mastitis and 538 (30.5%) out of 1766 blood samples were positive for different haemoprotezoans at DI Labs.

- All the 96 pasteurized milk samples from University Experimental Dairy unit, LUVAS were found to be adequately pasteurized. However, the FSSAI process hygiene criteria were found to be fulfilled only by 38 (39.6%) milk samples, indicating post-pasteurization contamination.
- A total of 70/138 water samples were of potable quality and 64 samples were non-potable. The remaining samples (04) were of doubtful quality with high bacterial counts.

## 18. Veterinary Surgery and Radiology

- External skeletal fixation (type-II) with centrally threaded Steinman pins alone is better and effective technique for management of metacarpal and metatarsal compound fractures in bovine as compared to its use along with application of PMMA (Polymethyl methacrylate) bone cement on the fracture site.
- Bovines with body weight more than 200 kg, anaemic, emaciated body condition and severely infected fractured wound are poor subjects for external skeletal fixation (type-II) application in metacarpal and metatarsal compound fractures.
- Loosening of pins, formation of pus in pin tract and bending of pins were the common complications of external skeletal fixation (type- II) in bovines.
- Post-operative complications were less in dogs



Fig. 45. C-arm use in orthopaedics



Fig. 46. Anaesthesia Work station

- treated with bioactive glass as compared to collagen for fracture healing of long appendicular bones.
- Bioactive glass and collagen have similar efficacy for fracture healing in dogs as supportive agent along

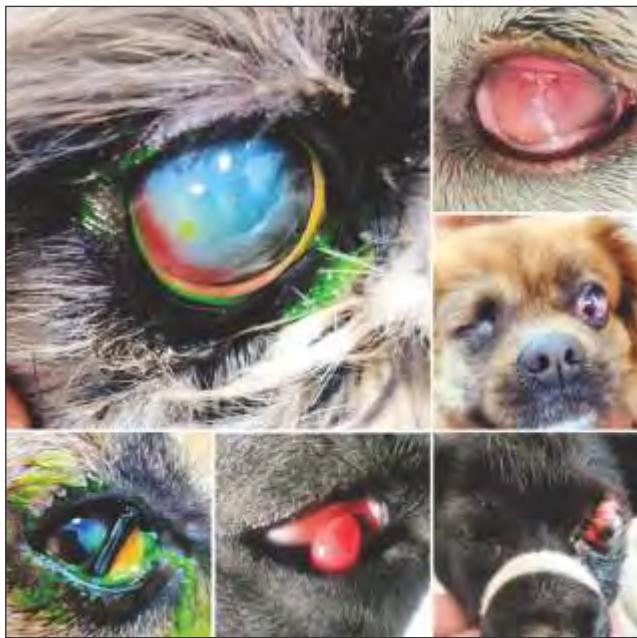


Fig. 47. a. Ophthalmic affections in Canine

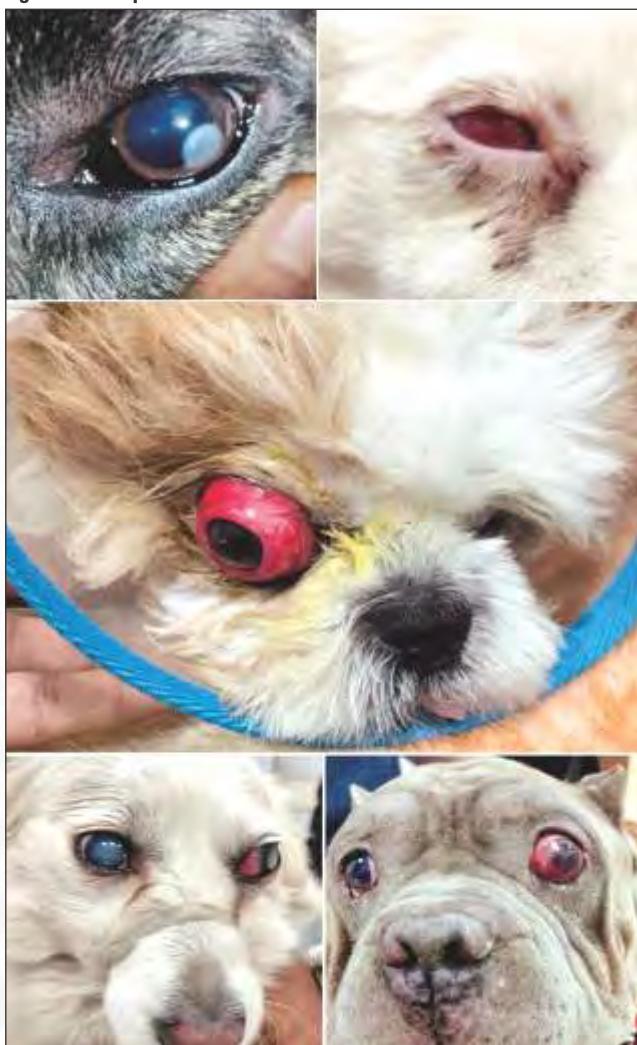


Fig. 47. b. Ophthalmic affections in Canine



Fig. 48. Eye examination by indirect and direct ophthalmoscope in dog



Fig. 49. a. Measurement of IOP by tonometer in dog, b. Phacoemulsification



Fig. 50. a. Compound fracture of metatarsal bone, b. External Skeletal Fixation

with internal immobilization. (Fig. 45-50)

## 19. College Central Laboratory (CCL)

- A total of 9.56% (105/1098) serum samples of apparently healthy bovines and 46.43% (286/616) samples of bovines having history of abortion, retained placenta, hygroma and orchitis submitted to laboratory were found seropositive for brucellosis by ELISA.
- Serological evidences of brucellosis detected in



males (12/223, 5.38%) by ELISA indicate that brucellosis is affecting bovine male population also.

- A total of 11.36% (10/88) bovines having history of reproductive disorders and serologically negative for brucellosis were found seropositive for Q-fever by ELISA.
- A total of 17,516 quarter milk samples received from 4379 bovines (1332 cows & 3047 buffaloes) and 14791 (84.44%) samples were found to be culturally positive on bacteriological examination.
- A total of 25,048 bacterial isolates were obtained from 14,791 infected quarters of cows and buffaloes. Majority of isolates were *Staphylococcus* spp. (43.84%) followed by *Staphylococcus* spp. (35.48%) and *E. coli* (12.41%). Most of the Gram positive and Gram negative isolates showed higher sensitivity towards gentamicin followed by chloramphenicol.
- Prevalence of subclinical mastitis at LUVAS animal farm was found as 7.63 % (9/118) among Hardhenu cattle and 1.97% (4/203) for buffalo farm. The prevalence of subclinical mastitis among indigenous cattle herd was found to be nil.
- Out of 471 (211 canines, 249 bovines and 11 equines) clinical samples of urine, swabs of vagina/skin/ ear/ nose, faeces, blood, milk of canines/caprines, etc.), 409 samples (86.83%) were found as culturally positive during the period under report.

## 20. HPVK, Mahendragarh

- Total number of clinical cases attended in OPD during the year were 3648 (Medicine 2157, Surgery 1260, Gynaecology 231). (Fig. 51-59)
- Total number of lab samples tested during the year: 8653 {Milk Test-6003, ABST(milk)- 802 ABST (clinical)- 23, blood test: 1153, faecal test- 390, urine test-282}.
- Total income generated from total OPD clinical cases including Lab samples at HPVK, Mahendragarh during the year – Rs. 9,29,590 (April, 2023 to March, 2024) (75.40 % increase from last year; Rs. 5,29,980).
- **Extension:** Vocational Trainings (04) with 125

beneficiaries generated University income of Rs. 62,500, Mineral Mixture Feeding Demonstrations and Promotional campaigns lead to sale of 143 quintal (62% approx. more than previous year) and generated income of Rs. 14,30,000/- Thus, contributing a total of Rs. 14,92,500/- in university income through extension activities.

- Majority of surgery cases were of buffaloes (539) followed by dog (361), cattle (153), goat (124), equine (39), cat (21) sheep (11), camel (04), rabbit (03), birds (02), pig (02) and monkey (01).
- Majority of medicine cases were of buffalo (927) followed by canine (593), cattle (329), caprine (210), equine (62), camel (13) and other species (23).
- A total of 231 cases of Veterinary gynecology and obstetrics were presented and treated. Highest no. of cases recorded were in buffaloes (132) followed by cattle (38), dog (34), goat (22), sheep (3) and equine (2).
- *In vitro* cultural sensitivity assay of 802 samples revealed that gram-positive, gram-negative, *Candida* spp. was detected in 59.07%, 24.66%, 2.13%, of the isolates, respectively. Mixed infection of Gram-positive and Gram-negative was found in 82 (10.26%) of the isolates from cattle and buffalo. Amikacin was found to be the most sensitive antibiotics followed by gentamicin, moxifloxacin, chloramphenicol, cefoperazone + sulbactum, enrofloxacin and levofloxacin.
- Overall, 50.65% (584/1153) blood samples were found positive for detection of haemoprotzoan/ haemorickettsial disease. 55.68% (642/1153) blood samples have less Hb. conc. less than the reference values of various species. 08.46% (33/390) faecal samples were found positive for detection of various faecal parasitic eggs. 50.77% (143/282) urine samples were found positive for ketosis.

## 21. HPVK, Uchani (Karnal)

- Total number of OPD and IPD cases treated during the year 2023-24 was 13,812 (Fig. 62-65).
- In this year, a total of 10,591 (76.67%) medicinal,





Anti Rabies Clinical Camp (HPVK, Mahendergarh)



One day Women Farmers Workshop (Bawania)



Clinical Conference for Veterinarians (in-services)



Skill Development Training for Women Farmers ((Uchat)



Clinical Camp for Dairy Animals (Bhushan Kala)



Free Anti-Rabies Vaccination Camp (GVH, Narnaul)

Fig. 51. Various activities being organised by HPVK, Mahendergarh



A



B

Fig. 52. Mammary Gland Tumor in dog. A (Preoperative); B (Postoperative)



Fig.53. Mandibular fracture in cattle calf: A, B. Bilateral mandibular fracture in cattle calf during dystocia in field; C, D. Postoperative-mandibular fracture stabilized with interdental wiring and sutures

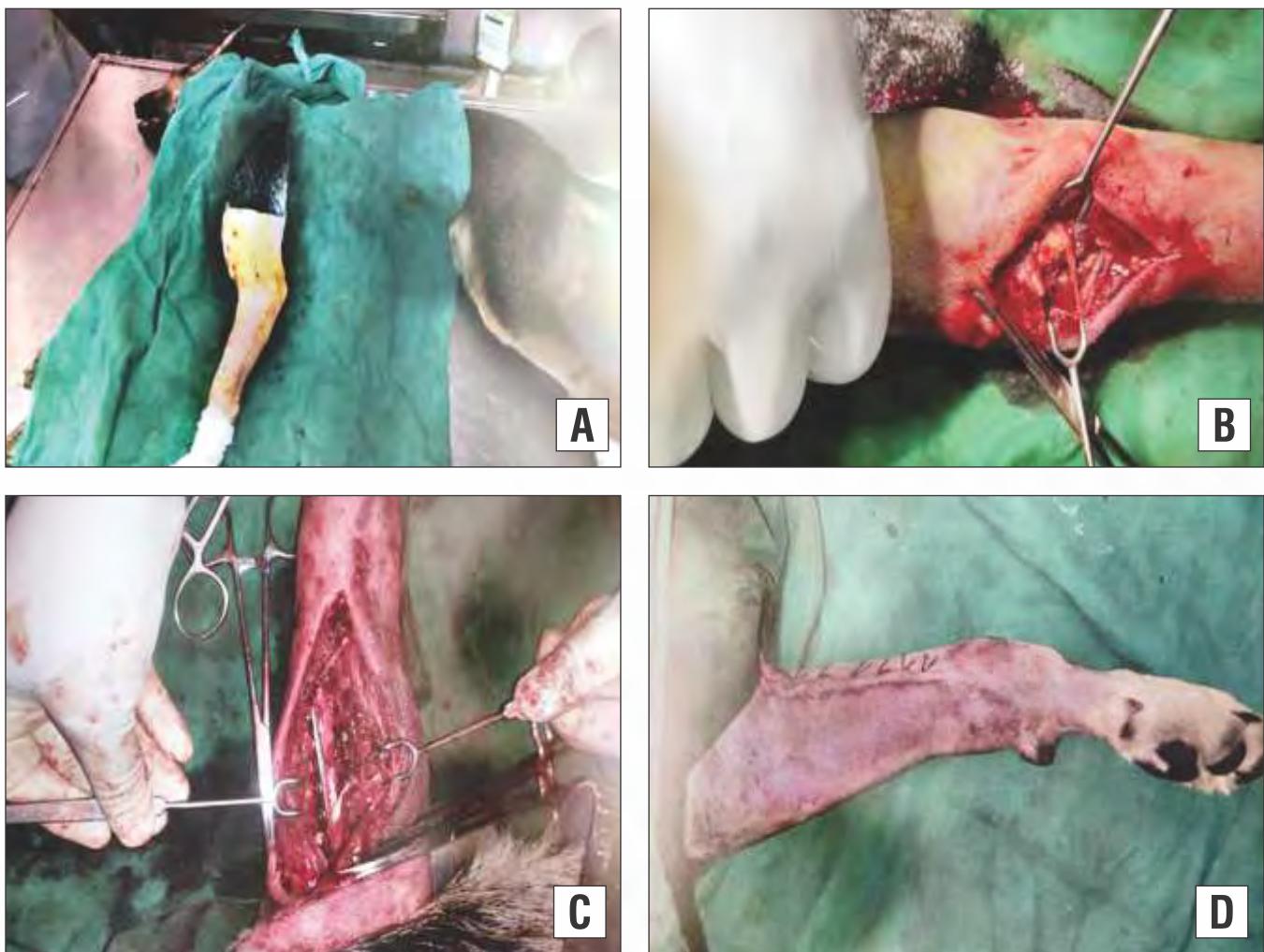


Fig.54. Plating in Radius fracture in dog. A, Surgical preparation of dog with radial fracture. B. Fracture site of radius shaft; C. Plating on fracture site; D. Postoperative



Fig. 55. Fibrosed mass on teat in goat. Left side (Pre operative), right side (Post operative)



Fig. 56. Tibia fracture in dog stabilized with Plaster of paris cast at clinical camp

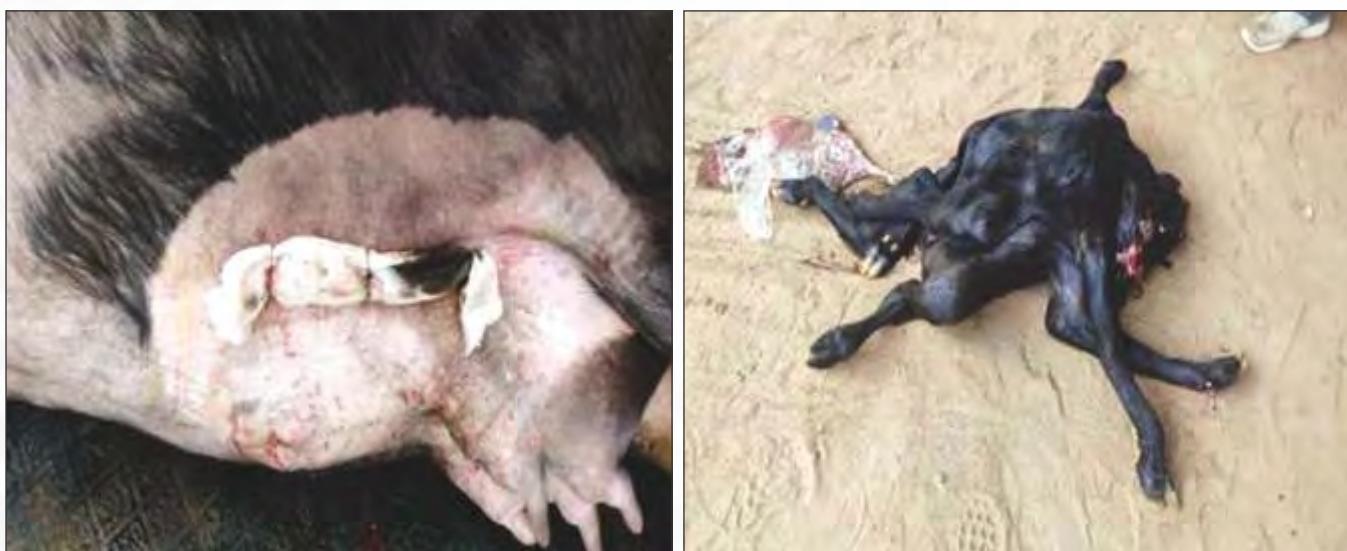


Fig. 57. Faetal monster-conjoined twin-*Thoracoabdomino pyopagus* retrieved by caesarian in a buffalo



Pre operative



Post operative

Fig. 58. Buccal fistula in mare.



Fig. 59. Vulvar warts in mare removed surgically



2,282 (16.52%) surgical, and 939 (6.7%) gynaecological and obstetrical cases were treated.

- During 2023-24, a total of 14,364 samples from the OPD were processed in the diagnostic laboratory, Karnal. These included 7,809 blood samples, 969 fecal samples, 118 urine samples, 2,060 milk samples, and 3,408 serum samples.
- The testing of 124 abortion cases in buffaloes using ELISA revealed that 47 were positive for brucellosis. Therefore, it is crucial to quarantine new animals and conduct brucellosis testing for all abortion cases in dairy herds.
- The antibiogram of mastitis-positive samples

indicated higher sensitivity to gentamicin, with 78.82% in cows and 73.45% in buffaloes, followed by enrofloxacin, which showed 77.2% sensitivity in cows and 77.11% in buffaloes. However, up to 6.6% of milk samples from cattle and 9.14% from buffaloes exhibited resistance to all antibiotics tested in the CST.

- Molecular confirmation of *Theileria orientalis* in the bovines of Haryana was conducted using molecular markers, specifically the 18S rRNA and MPSP genes (Fig. 60).
- All Indian isolates of *T. equi* were classified as genotype A based on phylogenetic analysis of the 18S rRNA (n=14) and EMA-1 genes (n=18) (Fig. 61).

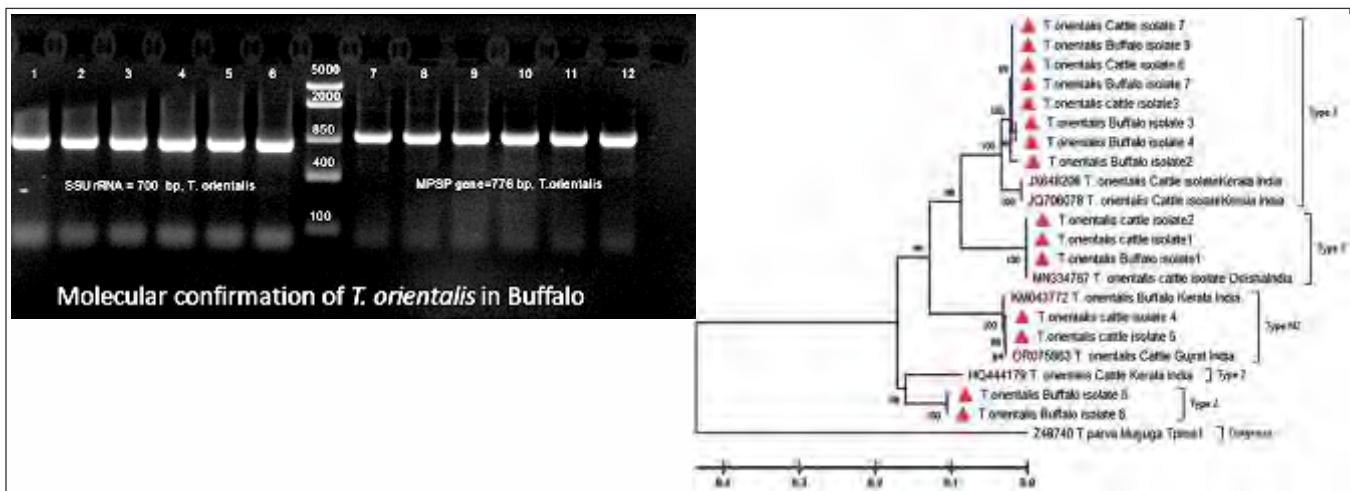


Fig. 60. Molecular confirmation and genotyping of *Theileria orientalis* based on MPSP and SSU rRNA genes

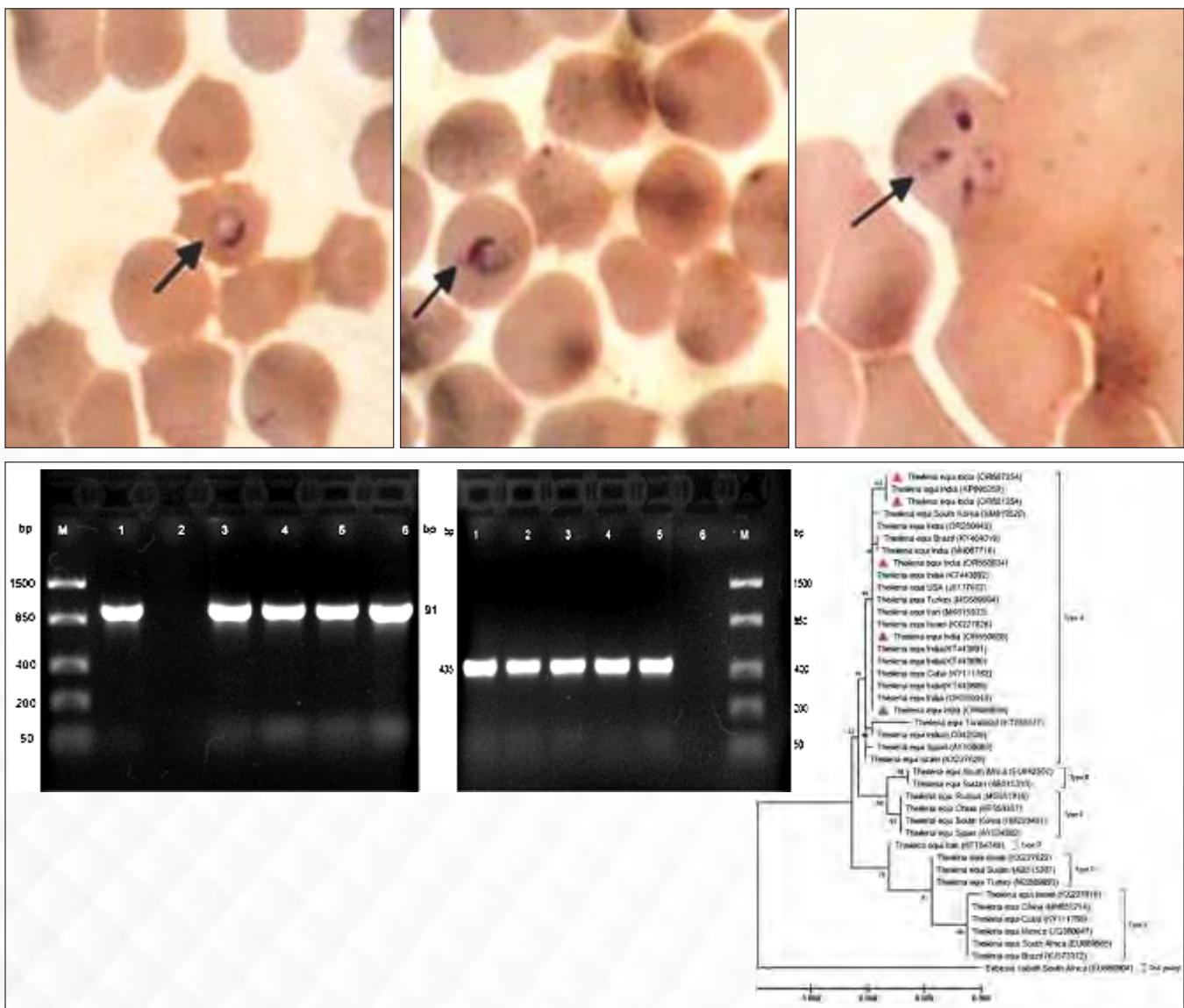


Fig. 61. Morphological, molecular confirmation and genotyping of *Theileria equi*



Ewe with dystocia



Ewe after Caesarian Section



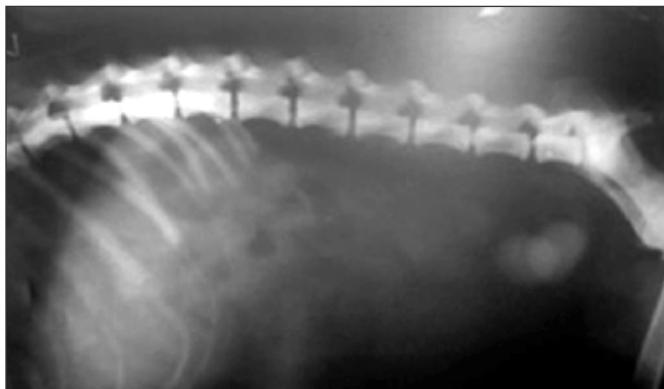
Caesarian Section in Ewe to remove one dead foetus

Fig. 62. Caesarean section in ewe



Intestinal loops with foreign body localised and then foreign body removed

Fig. 63. Surgical removal of foreign body from dog intestine



X-Ray showing radio-opaque shadow in caudal abdomen



Female Dog after Urolith removal



Two large sizes urinary calculi removed from U.B. of Bitch

Fig. 64. Surgical removal of urolith in a bitch



Cow undergoing Laparotomy



Cow after Enterotomy



Intussuscepted Intestinal Loops Notice empty loops after affected site



Intussuscepted part localised, Incised and rest sutured



Fig. 65. Surgical management of intussception in a cow



Fig. 66. a. Mahila Pashu Gyan Divas Celebration, Village Munak

- Various extension activities were carried out by HPVK Uchani (Fig. 66).

## 22. HPVK, Lakaria, Jhajjar

- Organized two events with PVK, Rohtak to raise awareness on scientific livestock practices.
- Delivered over 20 lectures by HPVK faculty in ICAR dairy programs for SC women/youth.
- Conducted two distribution and awareness camps for SC farmers with PVK-Rohtak and Sonipat.
- Presented seven lectures in Jhajjar government schools on veterinary professions and animal husbandry.
- Advised livestock farmers on preventive measures, therapeutic regimes, and management practices to boost productivity.

## 23. HPVK, Bahal, Bhiwani

- Established a small laboratory to process blood, feces, urine, milk, and skin scrapings.
- Attended 63 cases of surgery, gynecology, obstetrics, and general medicine.
- Undertook surgical interventions for both large and small ruminants (e.g., tail docking, teat fistula, enucleation) and pet animals.
- Organized six one-day kisan goshthis on topics such as winter animal management, importance of mineral mixture, dairy cattle diseases, and goat farming in Behal and nearby villages.
- Rabies Awareness Campaign was organized by HPVK, Behal on September 25-27, 2023, at various educational institutes in Bahal and Bhiwani for World Rabies Day.



Fig. 66. b. Unit level kisan mela, Village Rasin (Karnal)

## 24. Dairy Chemistry

- Out of 60 milk samples of packaged milk of eight brands, none of the samples were found to be adulterated with water.
- Three cow milk brands, two double toned and one full cream milk did not comply with FSSAI standards for minimum fat percentage.
- Two brands did not comply with FSSAI standards for minimum SNF percentage.
- One was found to be adulterated with sorbitol. One was found to be adulterated with maltodextrin and was abnormal.
- Out of 65 milk samples collected from various dairy shops at Hisar, 37 samples i.e., 57 percent samples did not comply with FSSAI standards for minimum fat percentage, 53 samples i.e., 82 percent samples did not comply with FSSAI standards for minimum SNF percentage. Only 9 samples i.e., 14 percent samples complied with FSSAI standards for minimum fat and SNF percentage.
- 48 out of 65 samples of milk contained water as an adulterant. Formaldehyde was detected in 3 percent samples. Urea was also detected in 1.5 percent samples. Sorbitol was detected in 5 percent samples and 3 samples i.e., 5 percent samples showed abnormal reading indicating adulteration with detergents, vegetable oil, hydrogen peroxide or having quite high concentration of adulterants. Sucrose was detected in one sample (1.5 percent samples). Two samples i.e., 3 % of samples were found to be adulterated with sodium bicarbonate added as neutralizer.





- Out of 135 milk samples collected from milkmen 63 samples contained water as an adulterant. 50 samples did not comply with FSSAI standards for minimum fat percentage, 71 samples did not comply with FSSAI standards for minimum SNF percentage. Neutralizers (Sodium bicarbonate and/or Sodium carbonate) were detected in 19 samples. Sucrose was detected in 2 samples. One sample was found to be adulterated with melamine. Formaldehyde was detected in 4 samples. 10 samples showed abnormal reading indicating adulteration with detergents, vegetable oil, hydrogen peroxide or having quite high concentration of adulterants.
- Based on these outcomes, preventive and corrective measures may be defined and focus on the training of farmers, local vendors, milkmen, entrepreneurs and consumers regarding extent and impact of adulteration on health and economies of individuals is of utmost importance.

## 25. Dairy Technology

### Development and Characterization of Corn Starch-based Nanocomposite Films with Aloe Vera Conjugated Silver Nanoparticles for Active Packaging Applications:

- Use of a non-toxic reducing agent Aloe vera extract to synthesize silver nanoparticles maintains the eco-friendly character of starch films.
- Synthesized  $Al/AgNPs$  were spherical with diameters approx. 110 nm and crystalline in nature.
- Optically, the nanocomposite films obtained were homogeneous and the colour varied from colourless to yellow.

- With regard to the barrier properties, a decrease in water vapour permeability with increasing concentration of  $Al/AgNPs$  was observed.
- Besides,  $Al/AgNPs$  incorporation contributed to the matrix reinforcement, since more resistant and tough materials were developed.
- Nanocomposite films exhibited strong antimicrobial activity against *E. Coli* therefore, they are expected to have high potential for the use as active food packaging materials.
- Films containing 5%  $Al/AgNPs$  may be selected to further study their effect on the shelf life of a dairy product. However, for future applications in food, tests on the  $Al/AgNPs$  toxicity and migration to the product are necessary.

## NEW BENCHMARK OF SUCCESS

### Restoring Vision in a Rescued Rhesus Monkey

Department of Veterinary Surgery and Radiology at the Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) successfully restored vision in a rescued rhesus monkey, providing him with a second chance at life. A male rhesus monkey was rescued by the vigilant workers of a local gaushala (cow shelter) and brought to Department of Veterinary Surgery and Radiology, LUVAS. Upon thorough ocular examination, it was found that one of the monkey's eyes was completely damaged beyond repair. However, his other eye still had the potential for vision restoration. The surgical team proceeded with phacoemulsification, a modern technique commonly used in cataract surgery and removed the damaged lens in the monkey's eye, which had clouded due to cataract formation.



## EXTENSION EDUCATION

The University has a well-structured extension education and technology transfer program for animal health, production, fisheries, and value addition for end stakeholders. With livestock owners, field workers, and research fine-tuning based on trade, the Directorate of Extension Education serves as a technical exchange interphase. This directorate organizes several training programs, clinical camps, and other field initiatives to raise knowledge of better husbandry and production techniques among Haryana's farmers, women and rural youth.

### Major focus areas in different extension activities:

- a) Reducing calf mortality
- b) Adoption of AI and breeding with superior bulls
- c) Reducing age at first calving
- d) Decreasing inter calving period
- e) Balanced feeding with mineral mixture feeding
- f) Pedigree and farm record keeping
- g) Value addition of milk and milk by-products
- h) Popularization of short duration and fast-growing fodder varieties

### RADIO TALKS DELIVERED BY FACULTY

Name of Faculty Member & designation	Topic	Date	Type of talk	Broadcast from
Dr. Neelish Sindhu, Assistant Professor, Veterinary Clinical Complex	Care of animals in monsoon season	17.07.2023	Radio talk	All India Radio, Hisar
Dr. A. K. Pandey, Professor & Head, Veterinary Gynaecology and Obstetrics	Reproductive issues in cows and buffaloes	24.07.2023	Radio talk	All India Radio, Hisar
Dr. Davinder Singh, Scientist/ Extension Specialist, HPVK, Mahendergarh	<i>Krishi Jagat</i> phone in Program ( <i>Pashu Palan Sambhandi Samasya v Sujhav</i> )	22.09.2023	Radio talk	All India Radio, Rohtak
Dr. Jyoti Shunthwal, Scientist and Dr. Davinder Singh, Scientist/ Extension Specialist, HPVK, Mahendergarh	World Rabies Day: <i>Prevention and Control of Rabies</i>	27.09.2023	Radio talk	Community Radio Station, Narnaul
Dr. Pankaj Kumar, DIO, DI Lab, Rohtak	<i>Pasuo ki samasyaye avm samadhan</i> , Live Phone in Program	20.10.2023	Radio talk	All India Radio, Rohtak
Dr. Jyoti Shunthwal, Scientist, HPVK, Mahendergarh	<i>Batchheet- Byat aaye pashuon ka uchit aahar</i>	31.10.2023	Radio talk	All India Radio, Rohtak
Dr. Dipin Chander Yadav, Scientist, Livestock Production Management	Programme Title: <i>Krishi Jagat</i> : Topic: <i>Care and Management of</i>	21.11.2023	Radio talk	Akashvani Rohtak





Name of Faculty Member & designation	Topic	Date	Type of talk	Broadcast from
Dr. Gyan Singh, Associate Professor & Head, VCC	<i>Pashupalan sambandhi samsya v suj hav</i>	29.12.2023	Radio talk	All India Radio, Rohtak
Dr. Pankaj Kumar, DIO, DI Lab, Rohtak	<i>Pasuo ki samasyaye avm samadhan, Live Phone in Program</i>	09.02.2024	Radio talk	All India Radio, Rohtak
Dr. Ramesh Kumar, DIO, VPHE	<i>Murgion ke mukhya rog, niyantran, upchar evam roktham</i>	15.02.2024	Radio talk	All India Radio, Rohtak
Dr. Davinder Singh, Extension Specialist, HPVK, Mahendergarh	<i>Krishi Jagat phone in Program (Pashu Palan Sambhandi Samasya v Sujhav)</i>	23.02.2024	Radio talk	All India Radio, Rohtak
Dr. Jyoti Shunthwal, Scientist, HPVK, Mahendergarh	<i>Krishi Jagat phone in Program (Pashu Palan Sambhandi Samasya v Sujhav)</i>	22.03.2024	Radio talk	All India Radio, Rohtak
Dr. Vandana Bhanot, Sr. DIO, DI Lab, Ambala	<i>Pashuon mein thanella rog ke karan, lakshan, upchar avm bachav</i>	24.05.2024	TV Talk	Dordarshan, Haryana

## A) Details of trainings organized by DEE for farmers, rural youth and women at Headquarter and outstations

### 1) Vocational trainings organized from 1 July, 2023 to 30 June, 2024

Training organizer (HQ/ PVK/HPVK)	Vocational trainings organized					Participants
	Dairy farming	Sheep and Goat farming	Poultry farming	Pig farming	Total trainings	
Headquarter, Hisar	9	3	1	1	14	611
PVK Sirsa	1	6	1	-	8	325
PVK Kaithal	2	-	-	-	2	52
PVK Jind	1	3	-	-	4	143
PVK Rohtak	1	-	-	-	1	48
PVK Bhiwani	3	4	-	-	7	323
PVK Rewari	1	-	-	-	1	38
PVK Gurugram	-	-	-	-	-	-
PVK Sonipat	1	3	-	-	4	108
HPVK M.garh	2	2	-	-	4	125
HPVK Karnal	1	-	-	-	1	44
PVK Palwal	2	2	-	2	6	155
<b>Total</b>	<b>24</b>	<b>23</b>	<b>2</b>	<b>3</b>	<b>52</b>	-
<b>Participants</b>	<b>1001</b>	<b>859</b>	<b>53</b>	<b>59</b>	<b>1972</b>	<b>1972</b>





**a) Vocational dairy farming trainings organized from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date of training	Venue	No. of participants			Total participants
			Male	Female	Total	
1.	13.09.2023-19.09.2023	Hisar	20	3	23	420
2.	29.11.2023-05.12.2023		39	11	50	
3.	14.12.2023-20.12.2023		42	8	50	
4.	16.12.2023-22.12.2023		41	9	50	
5.	23.12.2023-29.12.2023		38	12	50	
6.	28.12.2023-03.01.2024		43	7	50	
7.	17.02.2024-23.02.2024		46	1	47	
8.	01.05.2024-07.05.2024		38	12	50	
9.	18.07.2024-24.07.2024		47	3	50	
10.	19.12.2023-25.12.2023	Sirsa	46	4	50	50
11.	29.09.2023-06.10.2023	Kaithal	20	1	21	52
12.	22.02.2024-28.02.2024		30	1	31	
13.	28.12.2023-03.01.2024	Jind	47	3	50	50
14.	26.12.2023-01.01.2024	Rohtak	40	8	48	48
15.	17.10.2023-23.10.2023	Bhiwani	25	9	34	134
16.	22.12.2023-28.12.2023		42	8	50	
17.	27.12.2023-02.01.2024		43	7	50	
18.	21.12.2023-27.12.2023	Sonipat	34	2	36	36
19.	27.10.2023-02.12.2023	Mahendergarh	16	9	25	75
20.	28.12.2023-03.01.2024		50	0	50	
21.	26.12.2023-01.01.2024	Karnal	44	0	44	44
22.	21.07.2023-27.07.2023	Palwal	28	1	29	54
23.	09.01.2024-15.01.2024		24	1	25	
24.	21.12.2023-27.12.2023	Rewari	35	3	38	38
		<b>Total</b>	<b>878</b>	<b>123</b>	<b>1001</b>	<b>1001</b>

**b) Vocational sheep and goat farming trainings organized from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date of training	Venue	No. of participants			Total participants
			Male	Female	Total	
1.	06.07.2023-12.07.2023	Sirsa	41	6	47	249
2.	15.09.2023-21.09.2023		27	4	31	
3.	24.11.2023-30.11.2023		28	1	29	
4.	03.02.2024-09.02.2024		41	9	50	
5.	15.05.2024-21.05.2024		41	3	44	
6.	12.06.2024-18.06.2024		45	3	48	
7.	06.07.2023-13.07.2023	Bhiwani	46	4	50	189





Sr. No.	Date of training	Venue	No. of participants			Total participants
			Male	Female	Total	
8.	06.10.2023-12.10.2023		40	10	50	
9.	21.02.2024-27.02.2024		45	5	50	
10.	16.05.2024-22.05.2024		37	2	39	
11.	06.12.2023-12.12.2023	Palwal	30	1	31	59
12.	12.06.2024-18.06.2024		26	2	28	
13.	12.07.2024-18.07.2024	Hisar	34	16	50	147
14.	04.11.2023-10.11.2023		46	4	50	
15.	19.04.2024-25.04.2024		44	3	47	
16.	03.08.2023-10.08.2023	Sonipat	24	1	25	72
17.	13.10.2023-19.10.2023		24	3	27	
18.	24.05.2024-30.05.2024		12	08	20	
19.	17.11.2023-23.11.2023	Jind	18	14	32	93
20.	16.04.2024-22.04.2024		14	6	20	
21.	14.05.2024-20.05.2024		40	1	41	
22.	20.04.2024-26.04.2024	Mahendergarh	20	1	21	50
23.	29.05.2024-04.06.2024		23	6	29	
		<b>Total</b>	<b>746</b>	<b>113</b>	<b>859</b>	<b>859</b>

**c) Vocational poultry farming trainings organized from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date of training	Venue	No. of participants			Total participants
			Male	Female	Total	
1.	19.06.2024-25.06.2024	Hisar	27	-	27	27
2.	23.02.2024-29.02.2024	Sirsia	26	-	26	26
		<b>Total</b>	<b>53</b>	-	<b>53</b>	<b>53</b>

**d) Vocational pig farming trainings organized from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date of training	Venue	No. of participants			Total participants
			Male	Female	Total	
1.	28.08.2023-04.09.2023	Palwal	20	1	21	21
2.	16.02.2024-22.02.2024		19	2	21	21
3.	21.05.2024-27.05.2024	Hisar	16	1	17	17
			<b>Total</b>	<b>55</b>	<b>4</b>	<b>59</b>





**2) Trainings organized for farmers under project “Upgradation of knowledge and Skill of Scheduled Caste Women and youth to increase Livestock Productivity” funded by ICAR**

Sr. No.	Date of Training	Training organiser (HQ/PVK/HPVK)	Venue	No. of Participants
1.	01.03.2024 to 05.03.2024	Miranpur	Palwal	40
2.	02.03.2024 to 06.03.2024	Kala Sher	Kaithal	40
3.	04.03.2024 to 08.03.2024	Jeeta Kheri	Bhiwani	40
4.	07.03.2024 to 11.03.2024	Simla	Kaithal	40
5.	07.03.2024 to 11.03.2024	Meoka	Gurugram	40
6.	09.03.2024 to 13.03.2024	Mamera	Sirsa	40
7.	09.03.2024 to 13.03.2024	Bhushan Kalan	Mahendergarh	40
8.	11.03.2024 to 15.03.2024	Kharkhra	Hisar	40
9.	11.03.2024 to 15.03.2024	Munak	Karnal	40
10.	11.03.2024 to 15.03.2024	Bainsi	Rohtak	40
11.	11.03.2024 to 15.03.2024	Zundpur	Sonipat	40
12.	12.03.2024 to 16.03.2024	Sulkhani	Hisar	40
13.	12.03.2024 to 16.03.2024	Sehnoli	Palwal	40
14.	13.03.2024 to 17.03.2024	Bikaner	Rewari	40
15.	14.03.2024 to 18.03.2024	Panniwala Mota	Sirsa	40
16.	14.03.2024 to 18.03.2024	Uchat	Mahendergarh	40
17.	15.03.2024 to 19.03.2024	Mohammapur, Gujar	Gurugram	40
18.	16.03.2024 to 20.03.2024	Bhatgaon	Sonipat	40
19.	16.03.2024 to 20.03.2024	Chandi	Rohtak	40
20.	17.03.2024 to 21.03.2024	Choperi	Karnal	40
21.	18.03.2024 to 22.03.2024	Devsar	Bhiwani	40
22.	19.03.2024 to 23.03.2024	Turkiawas	Rewari	40
		<b>Total</b>		<b>880</b>

**B) Income generated by Headquarter, PVKs and HPVKs from 1 July 2023 to 30 June 2024**

Sr. No.	Activity	Amount (Rs.)
a)	Trainings	1012600
b)	Sale of mineral mixture	3678600
c)	Vehicle charges, calendar, auction etc.	80558
d)	MOUs	40000
	<b>Total</b>	<b>4811758</b>





<b>Sr. No.</b>	<b>Activity</b>	<b>Amount (Rs.)</b>
<b>a)</b>	<b>Income generated through trainings</b>	
<b>Sr. No.</b>	<b>PVK/HPVK</b>	<b>Amount (Rs.)</b>
1.	Hisar (Headquarter)	331600
2.	PVK Sirsa	162500
3.	PVK Rohtak	24000
4.	PVK Bhiwani	161500
5.	PVK Rewari	19500
6.	PVK Kaithal	26000
7.	PVK Jind	71500
8.	PVK Sonipat	54000
9.	PVK Palwal	77500
10.	HPVK Karnal	22000
11.	HPVK M.Garh	62500
	<b>Total</b>	<b>1012600</b>
<b>b)</b>	<b>Income generated by sale of mineral mixture</b>	
<b>Sr. No.</b>	<b>PVK/HPVK</b>	<b>Amount (Rs.)</b>
1.	PVK Rohtak	340000
2.	PVK Sirsa	458200
3.	PVK Gurugram	226000
4.	PVK Palwal	280000
5.	PVK Bhiwani	507400
6.	HPVK Mahendergarh	1430000
7.	HPVK Karnal	347000
8.	PVK Jind	65000
9.	PVK Sonipat	240000
10.	PVK, Kaithal	91000
	<b>Total</b>	<b>3678600</b>
<b>c)</b>	<b>Income generated by calendar sale, vehicle charges and other</b>	
1.	Vehicle charges , calendar, auction etc.	80558
	<b>Total</b>	<b>80558</b>
<b>d)</b>	<b>Income generated by MOUs</b>	
1.	PNB FTC Sacha Khera	40000
	<b>Total</b>	<b>40000</b>





**C) Unit Level Kisan Mela/ Clinical camps organized by Directorate of Extension Education from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date of Clinical Camp	Venue	Clinical Camp organiser HQ/PVK /HPVK	Free Mineral mixture distributed in each camp
1.	05.08.2023	Village Dhanouri, Kaithal	PVK, Kaithal	93 participants were benefitted
2.	19.08.2023	Pichopa Khurd, Charkhi Dadri	PVK, Bhiwani	142 livestock farmers were benefitted in the clinical camp of this event.
3.	25.08.2023	Kharkara, Meham, Rohtak	PVK, Rohtak	207 participants were benefitted and animals were treated by team of experts of University
4.	26.08.2023	Badwasani, Sonipat	PVK, Sonipat	More than 80 animals were treated for different disease conditions and more than 200 farmers visited the clinical camp for advice from experts
5.	08.09.2023	Nain Sukhpura, Rewari	PVK, Rewari	50 participants were benefitted
6.	16.09.2023	Jatauli, Pataudi, Gurugram	PVK, Gurugram	A total of 123 animals were treated in the Unit Level Kisan Mela. More than 100 farmers participated in the Mela from the villages of Pataudi Block.
7.	21.09.2023	Arua, Faridabad	PVK, Palwal	152 Livestock farmers were benefitted
8.	26.09.2023	Modia Khera, Sirsa	PVK, Sirsa	132 participants were benefitted and animals were treated by team of experts of University
9.	30.09.2023	Shahpur, Jind	PVK, Jind	More than 215 animals were treated for different disease conditions and more than 200 farmers visited the clinical camp
10.	12.10.2023	Bachhod, Mahendergarh	HPVK, Mahendergarh	152 participants were benefitted
11.	04.11.2023	Hasanpur, Karnal	HPVK, Karnal	200 participants were benefitted and animals were treated by team of experts of University
12.	05.10.2023	Chamarkhera, Hisar	Headquarter	Around 150 participants were benefitted and more than 100 animals were treated by team of experts of University

**D) Details of extension activities in which DEE participated or conducted in collaboration with others from 1 July, 2023 to 30 June, 2024**

Sr. No.	Date	Activity	Venue	Participants	Details
1.	26.08.23	Promotion of Self-Sustainability in Gaushala by Scientific Livestock Practices in collaboration with Animal Husbandry & Dairying Department, Mahendergarh participated in the workshop	Village Baraf, Rewari	100	About 100 farmers





2.	29.08.2023	Workshop on 'Self Sustainability of Gaushalas' in collaboration with Animal Husbandry Department, Mahendergarh	O/o DDAH, Narnaul	100	About 100 Gaushala farmers participated in the workshop
3.	22.09.2023	Infertility camps	Hassanpur, Taoru, Nuh	252	252 farmers and 229 animals registered for treatment
4.	30.09.2023	Infertility camps	Rathiwas Rajput, Nuh	259	259 farmers and 238 animals registered for treatment
5.	30.09.2023	Rathiwas Nuh	PVK Kaithal	211	211 participants were benefitted and animals were treated by team of experts of university
6.	23.11.2023	Clinical conference (Field officers' and Scientists Interaction) on Fluid therapy in Animals	O/o DDAH, Narnaul	50 Veterinary Surgeons	Participation of 50 Veterinary Surgeons
7.	04.12.2023	One-day workshop with Women's Self-Help Groups (SHGs) and Farmers' Producer Organizations (FPOs)	Bawania, M.garh	100	About 100 women farmers participated
8.	19.01.2024	District level Mela organised by Agriculture Department	Mandi Ateli	1000	Extension talk was given
9.	03.11.2023	Participation in District Level Mela of Horticulture Department	Dahina, Rewari	1000	LUVAS stall was setup at the fair
10.	28.05.2024	Training programme for Hathin Farmers Producer Company Ltd. (FPO)	Village Pahari, Hathin, Palwal	20	One day training programme was organized
11.	24-26.02.2024	State Livestock Show organized by Animal husbandry department	Central University of Haryana, Mahendergarh	Farmers from all over Haryana	LUVAS stall was setup at the show
12.	08-10.10.2023	Krishi Mela organized by CCSHAU	CCSHAU mela ground	Farmers from all over Haryana and neighbouring states	LUVAS stall was setup at the fair
13.	18-19.03.2024	Krishi Mela organized by CCSHAU	CCSHAU mela ground	Farmers from all over Haryana and neighbouring states	LUVAS stall was setup at the fair
14.	07.03.2024	Mahila Pashupalak Gyan Diwas	HPVK Karnal	100 farmers	Mahila Pashupalak Gyan Diwas was celebrated on with participation of about 100 farmers
15.	21-25.12.2023	Swadeshi Jagran Manch Program	Old Government College Ground, Hisar	Many visitors visited the stall	LUVAS stall was setup at the program place
16.	05-13.12.2023	District Level Kisan Mela organized by Department of Agriculture & Farmers Welfare, Gurugram	Gurugram	Many visitors visited the stall	LUVAS stall was setup at the fair





## E) Other extension activities conducted during 1 July, 2023 to 30 June, 2024

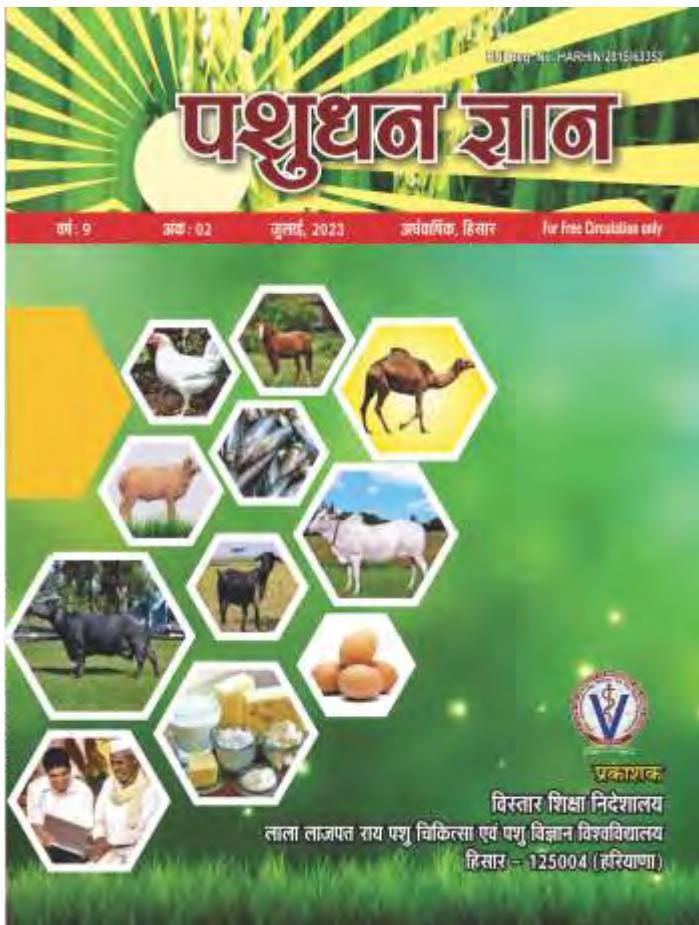
Sr. No.	Event	Place, Block, District	Brief particulars of the work
1.	Important days like World rabies day, World Milk Day, World Environment Day, Rashtriya Ekta Diwas etc. celebration, Goshthis, Farmers group meeting, Demonstration, Extension camps, farm visits and other activities.	All over Haryana	These programmes were conducted at different villages of Haryana
2.	Expansion to new villages for extension activities	All over Haryana	Around 87 new villages added
3.	Expert system on providing telephonic advisory to livestock farmers for prevention of disease outbreak and management of animals in flood affected/ water logged areas through automated call centre.	All over Haryana	To provide free of cost advisory to farmers in flood affected areas.

### i) Mera Gaon Mera Gaurav Scheme

Twenty villages in various districts were identified and adopted under "Mera Gaon Mera Gaurav" scheme of Government of India. Extension activities were carried out frequently in these villages.

**ii) Extension Publications:** The University publishes regular technical updates and other knowhow for the farmers in its half yearly magazine "Pashudhan Gyan". The magazine is registered with the Registrar, Newspaper of India. Initiated Masik Pashupalan Nirdeshika (e- Publication) for dissemination of scientific recommendation using social media tools. Pashupalak Calender-2024 provides useful information related to dairy farming in Hindi language.

### iii) Photos of Extension Publications



iv)

## Visit of farmers from other states

1. Twenty five female farmers from Hanumangarh district of Rajasthan visited the University on December 12, 2023 under one-day CAT- exposure visit sponsored by NABARD. The farmers were accompanied by Samaj Kalyan Avam Samnvit Vikas Sanstha (SWIDS), Hanumangarh (Rajasthan).



## EXTRA AND CO-CURRICULAR ACTIVITIES

12

Director Student's Welfare is the main force, who extracts the best out from students by making all the necessary arrangements for extra and co-curricular activities. The main goal is to polish the skills of the students and groom

them to become responsible, sincere and law abiding citizens of the country. Additionally, being an Estate officer of the University, he oversees the development and maintenance of the infrastructure of the institution.

### CO-CURRICULAR ACTIVITIES



Hon'ble Vice Chancellor, Prof (Dr.) Vinod Kumar Verma hoisting the Indian National Flag on the occasion of 77<sup>th</sup> Independence Day of India



Dr. Arju from LUVAS bagged first prize in zonal level elocution contest held at SKUAST-Jammu on 28-08-23



SPIC MACAY programme was organized by DSW, LUVAS on classical dance form of "Bharatnatyam" performed by Ms. Ragini Chandershekhar



Hon'ble Vice Chancellor, LUVAS and the Bharatnatyam artist Ms. Ragini Chandershekhar from SPIC MACAY amongst students and volunteers after the event



Administration of oath by the Hon'ble Vice Chancellor, LUVAS to the students, teachers and non-teaching staff on the occasion of birth anniversary of Mahatma Gandhi



Hon'ble Vice Chancellor, LUVAS along with officers participating in "Swachhta Hi Seva Abhiyan" on 2<sup>nd</sup> October, 2023



Poster and Rangoli making competitions: Hon'ble Vice chancellor LUVAS along with distinguished guests admiring the poster exhibition held on the occasion of Foundation Day of LUVAS



AIDS awareness campaign organized at LUVAS campus: Students of LUVAS participating in the AIDS awareness campaign organized in the University premises



Celebrations of National Youth Day at LUVAS: Dr. Shamim Sharma addressing the students of LUVAS on the occasion of "National Youth Day".

## LALA LAJPAT RAI BIRTH ANNIVERSARY CELEBRATIONS



Worthy Vice Chancellor Prof. (Dr.) Vinod Kumar Verma paying homage to 'Punjab Kesari' Lala Lajpat Rai Ji



Statutory officers along with representatives of teaching and non-teaching staff at the occasion of birth anniversary of Lala Lajpat Rai Ji for paying homage to the 'Punjab Kesari'



Participant students exhibiting their art in calligraphy competition held on the occasion of Lala Lajpat Rai Birth Anniversary at LUVAS





**"Swachhta Abhiyan"** organized on Mahatma Gandhi Martydom day at LUVAS campus to pay tributes to the Father of Nation



Poster competition organized to create awareness on the Mission LIFE: Save water, Save Energy and Save soil: Students expressing their thoughts on canvas in a poster competition held on 7.5.2024 under "Mission Life Campaign"

**Yoga camp organized at LUVAS: Students participating in Yoga Camp organized at LUVAS from 12.06.24 to 20.06.24**



**75<sup>th</sup> Republic Day celebrations at LUVAS: Worthy Vice Chancellor Prof. (Dr.) Vinod Kumar Verma hoisted the tricolor flag and addressing the gathering on the auspicious occasion of 75<sup>th</sup> Republic Day of India**



**Students, staff and teachers participating in the plantation drive on the occasion of World Environment day**





Oath: Celebration of Sardar Vallabh Bhai Patel Birth Anniversary as 'Rashtriya Ekta Diwas' on 31.10.2023



Oath: Celebration of Anti-corruption Week on 30.10.2023

World Yoga Day celebrations: Statutory officers, faculty, non-teaching employees and students participating in yoga activities at the occasion of World Yoga day



Death Anniversary of Lala Lajpat Rai celebrated on 17.11.2023



National Voters' Day organized on 25.01.2024

## 2. Sports Activities

Sports and recreational activity facilities available in CCSHAU Hisar Campus are being shared by LUVAS students and staff. Following facilities are available:

1. **Faculty club:** Indoor games like Table tennis, Squash and Badminton court, Swimming pool etc. for faculty

2. Gym for students and faculty members
3. Well-furnished ultra-modern auditorium for the organization of various cultural events
4. Outdoor games like basketball, cricket, football, volleyball, handball and athletic track etc.

**BASKETBALL INTER CLASS TOURNAMENT 21<sup>ST</sup> - 26<sup>TH</sup> JULY, 2023**

Students during Basketball Inter-Class Tournament

**51<sup>ST</sup> INTER-COLLEGE SPORTS MEET WITH CCS HAU, HISAR (7<sup>TH</sup> OCTOBER TO 2<sup>ND</sup> DECEMBER, 2024)**

Secured Overall 2<sup>nd</sup> Position (Inter-College Games & Athletic)





Various sports activities organized during year 2023-24



Inter Class Cricket Championship (17<sup>th</sup> May to 2<sup>nd</sup> June 2024)

## STUDENT COUNSELLING & PLACEMENT CELL ACTIVITIES

### Activity/Achievements:

#### 1. Organization of National Student Paryavaran Competition (NSPC 2023)

National Student Paryavaran Competition (NSPC 2023) was held at the EcoMitram app from 1<sup>st</sup> July, 2023 to 21<sup>st</sup> Aug, 2023 for which Dr. Renu Gupta, ADSW (Counselling and Placement) had been nominated as Nodal Officer (ENO).

Students from both the colleges (College of Veterinary Sciences and College of Dairy Sciences and Technology) participated in the competition. A total of 116 students participated in this competition.

#### 2. Celebration of World Entrepreneurs' Day on 21<sup>st</sup> Aug, 2023

Counselling and Placement Cell, Directorate of Students' Welfare organized talk by two young successful entrepreneurs Dr. Parmod Kumar, Pet Chikitsa Multispeciality Hospital, Gurugram, Haryana and Dr. Pooja Kundu, First Choice Vet Diagnostic Center, Near JIET college, Safidon Road, Jind, who are also alumni of Lala Lajpat Rai University of Veterinary and Animals Sciences. A total of 78 students participated in the event. Feedback forms were got filled by

the participants before the start of event and after its completion.

Based on the feedback, it was recommended that the similar events may be organized regularly.

#### 3. Talk by Dr. Deepak Kumar, on NAVLE and DVM Licensing Exams on October 25, 2023

Placement and Counselling Cell, Directorate of Student's Welfare organized an interactive talk by Dr. Deepak Kumar, Emergency veterinarian at BluePearl Vet Specialty and Emergency Center in California, USA. Dr. Deepak Kumar, an accomplished alumnus of the College of Veterinary Sciences, LUVAS Hisar, delivered a motivating and enlightening talk on the intricacies of preparing for and passing critical licensing exams like NAVLE and DVM. Dr. Kumar shared his first-hand experience and insights into the National Veterinary Licensing Examination (NAVLE) and Doctor of Veterinary Medicine (DVM) licensing exams. He provided valuable tips and strategies for successfully preparing and passing these rigorous tests. Dr. Kumar shed light on the myriad career opportunities available to veterinary graduates and postgraduates. He discussed the evolving landscape of veterinary medicine in the United States and how aspiring veterinarians can find their niche.



## PLACEMENTS

Graduates passing out from Lala Lajpat Rai University of Veterinary and Animal Science (LUVAS), Hisar mostly find employment across all parts of the globe in different types of organizations viz., State Government Organizations, GOI organizations, Private Organizations, Universities, Institutes of repute for higher education (both in India and abroad).

Graduates are regularly posted at prestigious

institutes like ASRB, FSSAI, Central Silk board, State Agricultural Universities etc. Among private organizations, Private pet hospitals (Tailsway, Vetic) are top recruiters.

Out of 323 placements in the year 2023-24, maximum got selected as Veterinary surgeon in Department of Animal Husbandry and Dairying (261), fifteen (15) graduates were placed in armed forces (12 in BSF and 3 in Remount Veterinary Corps).

## NCC Activities:

### Different events and activities 2023-24 organized by 1 HAR R & V SQN NCC Unit, Hisar

1. Annual Training camp from July 29 to August 7, 2023 was organized by 1 HAR R & V SQN NCC Unit, Hisar. Total 159 cadets were participated in camp. Cadets were given training in physical training, horse riding, mutual cooperation, social service, cooperation in disaster, knowledge of road safety rules, awareness about cyber crime, proper use of water, use of trees, measures to prevent fire, moral and inspirational values.



2. Women's day -2024 was celebrated by organizing an awareness rally by cadets of 1 HAR R & V SQN NCC Unit, Hisar
3. Millets year was celebrated by 1 HAR R & V SQN NCC Unit, Hisar. An awareness lecture on importance of millets was delivered by Dr. Sangeeta Chahal, Professor and Head of Food and Nutrition Department, I C College of Community Science, CCSHAU, Hisar.



4. 77<sup>th</sup> Republic Day was celebrated at Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar by 1 HAR R & V SQN NCC Unit, Hisar.
5. Sergeant Manish and Sergeant Rahul, NCC cadets and students of College of Veterinary Sciences, LUVAS, Hisar participated in Republic Day Camp- 2024.



Sergeant Manish and Sergeant Rahul, NCC cadets and students of College of Veterinary Sciences, LUVAS being congratulated by the Hon'ble Vice Chancellor, LUVAS for participating and winning laurels at Republic Day Camp- 2024.

6. Yoga day was celebrated by 1 HAR R & V SQN NCC Unit, Hisar



7. World Environment Day was celebrated by 1 HAR R & V SQN NCC Unit, Hisar. On this occasion tree plantation programme was organized by unit in University premises.





8. Cadets of 1 HAR R & V SQN NCC Unit, Hisar participated in Vets march organized on occasion of World Veterinary Day



9. Cadet Rahul (HR22SDR268460) won silver medal in poster making competition at EBSB1, Malekotla, Punjab.  
 10. Cadet Tarun Kadian (HR22SDR268361) won Bronze medal in tug of war and Silver medal in debate competition at NCC trekking expedition organized from October 20 -27, 2023 by UP Date.

## WORK OF ESTATE OFFICE

S. No.	Name of the University/College/ Faculty	Name of the Civil Work Undertaken	Location of Civil Work (specify college and place)	Cost (in lakhs)	Work Completed/ In Process	% ICAR Share	% State Share
1.	College of Veterinary Sciences	Special Repair/ Renovation of Labs.	Vety. Pathology, Vety. Microbiology & Animal Biotechnology	34.08	Completed	100%	-
2.	College of Veterinary Sciences	Special Repair/ Renovation of Aravali Hostel D-Block	Aravali Hostel D-Block	100.00	Completed (18.10.2021)	100%	-
3.	College of Veterinary Sciences	Special Repair/ Renovation of Godawari Hostel, LUVAS	Godawari Hostel	80.00	Completed (10.01.2023)	100%	-





## ONGOING INFRASTRUCTURE PROJECTS OF NEW CAMPUS, LUVAS HISAR

S. No.	Name of Work	Allotment (agreement amount in Crore)	Remarks
1.	Construction of VC/Admin building at New Campus	50.12 Revised amount 59.10	Currently finishing work and essential services work in progress.
2.	Construction of CODST at New Campus	70.44 Revised amount 81.52	In progress
3.	WTP (Water Treatment Plant) at New Campus	10.73	In progress
4.	STP (Sewerage Treatment Plant) at New Campus	7.84	In progress
5.	Construction of 05 No's Residential Block at New Campus	48.06	In progress
6.	Construction of 02 No's Hostels (Boy's and Girl's) at New Campus	59.97	In progress
7.	Construction of Animal Farms/Sheds for 3700 Animals + other small animals/Feed Stores/ Construction of Poultry farm shed Building	95.15	In progress

## ONGOING INFRASTRUCTURE PROJECTS OF OUTSTATIONS

S. No.	Name of Work	Allotment (agreement amount in lakhs)	Remarks
1.	Construction of Boundary Wall with Gate at RVDEC, Riwasa, Mahendragarh	29.40	Work in progress

## ONGOING INFRASTRUCTURE PROJECTS OF OUTSTATIONS EXECUTED BY PWD B&R

S. No.	Work Name	Executing Agency	Estimated Amount (in lakhs)	Remarks
1.	Construction of RVDEC of LUVAS at Riwasa, Mohendragarh	PWD (B&R), Narnaul	1152.40	Work in progress
2.	Construction of Boundary Wall of RVDEC, Keorak including Iron Gate and concertina coil in Kaithal Distt. & Construction of various building of RVDEC i.e., Technical Administrative Block, Post Mortem, Outdoor Clinic at Village Keorak, Kaithal	PWD (B&R), Kaithal	2200.00	Work in progress
3.	Construction of Boundary Wall for VLD Diploma College, LUVAS at Lakhnaur Sahib, Ambala	PWD (B&R), Ambala	284.91	Work in progress
4.	Construction of Academic and Administrative Block Veterinary Block and Mortuary Block for Diploma College of LUVAS at Lakhnaur Sahib, Ambala	PWD (B&R), Ambala	2088.76	Work in progress
5.	Construction of proposed Admn.-cum-Clinic Block, Processing-cum-Research Block, Buffalo shed, fodder store and silage PIT, road and parking at Khanda Kheri, LUVAS, Hisar	PWD (B&R), Hansi	1577.60	Work in progress





## STAFF CAPACITY BUILDING

### A. FACULTY PARTICIPATION IN CONFERENCES, SYMPOSIA AND WORKSHOPS

Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
1.	Dr. Sushila Maan Professor	Animal Biotechnology	XXI NAVS convocation-cum-scientific convention on “Strategies for enhancing productivity of dairy animals”	GADVASU, Ludhiana (Punjab) and National Academy of Veterinary Sciences (India), New Delhi at GADVASU, Ludhiana, Punjab	July 1-2, 2023
2.	Dr. Aman Kumar Sr. Scientist	Animal Biotechnology	X Annual convention of the society for Veterinary Sciences & Biotechnology (SVSBT) and national symposium on “Recent biotechnological advances in health and management of livestock, poultry and companion animals”	College of Veterinary Science & Animal Husbandry (Mhow), Nanaji Deshmukh Veterinary Science University, Jabalpur, Madhya Pradesh in collaboration with the Society for Veterinary Sciences and Biotechnology	October 05-07, 2023
3.	Dr. Poonam Ratwan, Scientist	Animal Genetics and Breeding	National workshop-cum-training on “Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry”	Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, COVS, LUVAS, Hisar	September 26-28, 2023
4.	Dr. Poonam Ratwan, Scientist	Animal Genetics and Breeding	XVII Annual convention of Indian society of animal genetics & breeding and national conference on “Advances in genetics and genomics for sustainable livestock transformation”	Indian Society of Animal Genetics and Breeding & ICAR-National Bureau of Animal Genetic Resources, Karnal at ICAR-NBAGR, Karnal	November 16-17, 2023
5.	Dr. Mahavir Singh, Scientist	College Central Laboratory	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
6.	Dr. Jinu Manoj, DIO	College Central Laboratory	International symposium on “Promotion of one health:	Department of Veterinary Public Health and	December 7-8, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	
7.	Dr. Ruby Siwach, Assistant Professor	Dairy Chemistry, CoDST	13 <sup>th</sup> IDEA convention & international conference on "Recent advances in engineering applications for sustainable dairying"	Conference Secretariat, College of Dairy Science and Technology, GADVASU, Ludhiana	October 13-14, 2023
8.	Dr. Tejinder Pal Singh, Assistant Professor	Dairy Microbiology, CoDST	11 <sup>th</sup> International conference on "Fermented foods, health status and social well-being"	North-Eastern Hill University, Shillong, Meghalaya, India & Swedish South Asian Network on Fermented Foods (SASNET-FF)	November 21-22, 2023
9.	Dr. Vandana Chaudhary, Assistant Professor	Dairy Technology, CoDST	13 <sup>th</sup> IDEA convention & international conference on "Recent advances in engineering applications for sustainable dairying"	Conference Secretariat, College of Dairy Science and Technology, GADVASU, Ludhiana	October 13-14, 2023
10.	Dr. Manoj Kumar Rose, Dean, PGS	Dean, PGS	Northern zone Vice-Chancellors' conference on "Implementation of NEP (National Education Policy) 2020"	Central University of Haryana at Law Auditorium, Sector-14, Punjab University, Chandigarh	November 22-23, 2023
11.	Dr. Sarita, Extension Specialist	Directorate of Extension Education	International conference on "Strategies for global food and nutritional security, sustainability and wellness (nutri-2023)"	CCSHAU, Hisar	December 4-6, 2023
12.	Dr. Jyoti Sunthwal, Scientist	HPVK Mahendergarh	Three days faculty development program (FDP) on "Gender dynamics of disaster risk and resilience"	KES Shroff College of Arts and Commerce, Mumbai	August 22-24, 2023
13.	Dr. Rahul Yadav, Scientist	HPVK Mahendergarh	International symposium on "Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Department of Veterinary Public Health and Epidemiology, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
14.	Dr. Biswa Ranjan Maharana, Scientist	HPVK, Uchani, Karnal	29 <sup>th</sup> International conference of the world association for advancement of veterinary parasitology	Chennai, India	August 20-24, 2023
15.	Dr. Biswa Ranjan Maharana, Scientist	HPVK, Uchani, Karnal	32 <sup>nd</sup> National congress of veterinary parasitology and national symposium on "Sustainable control of parasitic diseases for improved productivity of livestock in current scenario"	Department of Veterinary Parasitology, Bihar Veterinary College, Bihar Animal Science University, Patna under the Aegis of Indian Association for the Advancement of Veterinary Parasitology (IAAVP)	November 29-December 1, 2023
16.	Dr. Harpreet Singh, Scientist	HPVK, Uchani, Karnal	60 <sup>th</sup> Annual conference of the animal behaviour society (ABS2023)	Oregon Convention Center, Portland, Oregon, USA	July 11 – 15, 2023
17.	Dr. Harpreet Singh, Scientist	HPVK, Uchani, Karnal	Annual convention & international symposium on "Frontiers in theriogenology-research and practice"	Department of Animal Reproduction, Gynaecology & Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala & ISSAR Kerala Chapter under the aegis of the Indian Society for Study of Animal Reproduction	December 6-8, 2023
18.	Dr. Richa, Assistant Professor	Institute of Para Veterinary Sciences	Online IQAC cluster conduct session for aligning the new SOP guidelines for NAAC SSR preparation-2023	Online Zoom Platform	June 26, 2023
19.	Dr. Sonu Kumari, Assistant Professor	Livestock Farm Complex	Annual convention & International symposium on "Frontiers in theriogenology-research and practice"	Department of Animal Reproduction, Gynaecology & Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, & ISSAR Kerala Chapter under the aegis of the Indian Society for Study of Animal Reproduction	December 6-8, 2023
20.	Dr. Dipin Chander Yadav, Scientist	Livestock Production Management	XXXVIII Annual conference of Indian poultry science association (IPSAICON 2023) & national symposium on "Innovative poultry production strategies for	Division of Livestock Production and Management, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-Kashmir, Shuhama-190006	September 13-15, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			nutritional, socio-economic and environmental security	& Indian Poultry Science Association, Izatnagar (UP) at SKUAST, Shalimar, Srinagar	
21.	Dr. Vishal Sharma, Assistant Professor	Livestock Production Management	Half day workshop on “Inequality to empowerment for disaster resilience”	IUIN-DRR-NIDM, Ministry of Home Affairs, GOI at Campus of NIDM	October 13, 2023
22.	Dr. Ricky Jambh, Assistant Professor	Veterinary Medicine	Half day workshop on “Inequality to empowerment for disaster resilience”	IUIN-DRR-NIDM, Ministry of Home Affairs, GOI at Campus of NIDM.	October 13, 2023
23.	Dr. Swati Dahiya, Scientist	Veterinary Microbiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
24.	Dr. Akhil Kumar Gupta, Scientist	Veterinary Microbiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
25.	Dr. Akhil Kumar Gupta, Scientist	Veterinary Microbiology	Workshop on “Strategies to strengthen the Institutional capacities for quality, ranking and accreditation of higher educational institutions (HEIs) and universities”	Institute of Academic Excellence, Hyderabad, Telangana through online mode	April 04-05, 2024
26.	Dr. Anika Malik, Assistant Professor	Veterinary & Animal Husbandry Extension Education	5 <sup>th</sup> National conference of society for veterinary & animal husbandry extension (SVAHE) on “Smart livestock extension for enhancing farmers’ income-an extension bounty”	Khalsa College of Veterinary & Animal Sciences (KCVAS), Amritsar & Society for Veterinary & Animal Husbandry Extension (SVAHE), Amritsar, Punjab, India	October 12-14, 2023
27.	Dr. Anika Malik, Assistant Professor	Veterinary & Animal Husbandry Extension Education	1 <sup>st</sup> International extension education congress-2023 on “Rural transformation and sustainable agri-food system through community based	Society of Extension Education, Agra, Rajasthan Agricultural Research Institute (RARI), Durgapura, Jaipur, SKNAU, Jobner, Rajasthan	December 18-20, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			organisation (CBO) oriented extension strategy”		
28.	Dr. Pawan Kumar, Professor	Veterinary Anatomy	XXXVII Annual convention of Indian association of veterinary anatomists & national symposium on “Recent advances in veterinary anatomy and their applications for improvement of animal health and production”	Department of Veterinary Anatomy, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati (A.P)	December 05-07, 2023
29.	Dr. Gyan Singh, Associate Professor & Head	Veterinary Clinical Complex	Annual convention & international symposium on “Frontiers in theriogenology-research and practice”	Department of Animal Reproduction, Gynaecology & Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala & ISSAR Kerala Chapter under the aegis of the Indian Society for Study of Animal Reproduction	December 6-8, 2023
30.	Dr. Tarun Kumar, Assistant Professor	Veterinary Clinical Complex	National symposium and 4 <sup>th</sup> Annual convention of VIPM on “Advancing veterinary medicine for holistic development of animal health and productivity with a one health approach”	Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (SKUAST-J) & Veterinary Internal and Preventive Medicine Society at Faculty of Veterinary Sciences & AH, SKUAST-Jammu, R.S. Pura, Jammu, UT of J&K	December 18-19, 2023
31.	Dr. Neelesh Sindhu, Assistant Professor	Veterinary Clinical Complex	National symposium and 4 <sup>th</sup> Annual convention of VIPM on “Advancing veterinary medicine for holistic development of animal health and productivity with a one health approach”	Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (SKUAST-J) & Veterinary Internal and Preventive Medicine Society at Faculty of Veterinary Sciences & AH, SKUAST-Jammu, R.S. Pura, Jammu, UT of J&K	December 18-19, 2023
32.	Dr. Divya Agnihotri, Associate Professor	Veterinary Clinical Complex	Three days faculty development program (FDP) on “Gender dynamics of disaster risk and resilience”	KES Shroff College of Arts and Commerce Mumbai	August 22-24, 2023
33.	Dr. Anand Kumar Pandey, Professor	Veterinary Gynecology & Obstetrics	Annual convention & international symposium on	Department of Animal Reproduction, Gynaecology	December 6-8, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
	& Head		“Frontiers in theriogenology-research and practice”	& Obstetrics, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala, & ISSAR Kerala Chapter under the aegis of the Indian Society for Study of Animal Reproduction	
34.	Dr. Ravi Dutt, Assistant Professor	Veterinary Gynecology & Obstetrics	X Annual convention of the society for veterinary sciences & biotechnology (SVSBT) and national symposium on “Recent biotechnological advances in health and management of livestock, poultry and companion animals”	College of Veterinary Science & Animal Husbandry (Mhow), Nanaji Deshmukh Veterinary Science University, Jabalpur, Madhya Pradesh in collaboration with the Society for Veterinary Sciences and Biotechnology	October 05-07, 2023
35.	Dr. Aman Dev Moudgil, Assistant Professor	Veterinary Parasitology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
36.	Dr. Snehil Gupta, Assistant Professor	Veterinary Parasitology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
37.	Dr. Anil Kumar, Assistant Professor	Veterinary Parasitology	32 <sup>nd</sup> National congress of veterinary parasitology and national symposium on “Sustainable control of parasitic diseases for improved productivity of livestock in current scenario”	Department of Veterinary Parasitology, Bihar Veterinary College, Bihar Animal Science University, Patna under the Aegis of Indian Association for the Advancement of Veterinary Parasitology (IAAVP)	November 29 - December 1, 2023
38.	Dr. Vikas Nehra, Sr. Scientist & Head	Veterinary Pathology	XXXX Annual conference of the Indian association of veterinary pathologists and XIV annual meeting of the Indian college of veterinary	Indian Association of Veterinary Pathologists, Indian College of Veterinary Pathologists & ICAR-Indian Veterinary Research	December 20-22, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			pathologists and national symposium on "Advances in veterinary pathology for diagnosis and control of emerging diseases of livestock and poultry"	Institute, Izatnagar, Bareilly, Uttar Pradesh	
39.	Dr. Vikas Nehra, Sr. Scientist & Head	Veterinary Pathology	International symposium on "Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
40.	Dr. Deepika, Associate Professor	Veterinary Pathology	XXXX Annual conference of the Indian association of veterinary pathologists and XIV annual meeting of the Indian college of veterinary pathologists and national symposium on "Advances in veterinary pathology for diagnosis and control of emerging diseases of livestock and poultry"	Indian Association of Veterinary Pathologists, Indian College of Veterinary Pathologists & ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly, Uttar Pradesh	December 20-22, 2023
41.	Dr. Deepika, Associate Professor	Veterinary Pathology	International symposium on "Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
42.	Dr. Babu Lal Jangir, Assistant Professor	Veterinary Pathology	XXXX Annual conference of the Indian association of veterinary pathologists and XIV annual meeting of the Indian college of veterinary pathologists and national symposium on "Advances in veterinary pathology for diagnosis and control of emerging diseases of livestock and poultry"	Indian Association of Veterinary Pathologists, Indian College of Veterinary Pathologists & ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly, Uttar Pradesh	December 20-22, 2023
43.	Dr. Sushma, Assistant Professor	Veterinary Pathology	X Annual convention of the society for veterinary	College of Veterinary Science & Animal	October 05-07, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			sciences & biotechnology (SVSBT) and national symposium on “Recent biotechnological advances in health and management of livestock, poultry and companion animals”	Husbandry (Mhow), Nanaji Deshmukh Veterinary Science University, Jabalpur, Madhya Pradesh in collaboration with the Society for Veterinary Sciences and Biotechnology	
44.	Dr. Preeti Bagri, Scientist	Veterinary Pharmacology and Toxicology	National workshop-cum-training on “Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry”	Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, COVS, LUVAS, Hisar	September 26-28, 2023
45.	Dr. Vijeyta Tiwari, Assistant Professor	Veterinary Pharmacology and Toxicology	XXIII Annual conference of Indian society of veterinary pharmacology and toxicology and national symposia on “Integrated animal health care system: opportunities and challenges” and “Exploring new avenues for pharmacologists and toxicologists from employability perspective”	Department of Veterinary Pharmacology and Toxicology, College of Veterinary and Animal Science, Rajasthan University of Veterinary and Animal Sciences, Bikaner, Rajasthan, India	November 02-04, 2023
46.	Dr. Gaurav Gupta, Assistant Professor	Veterinary Pharmacology and Toxicology	XXIII Annual conference of Indian society of veterinary pharmacology and toxicology and national symposia on “Integrated animal health care system: opportunities and challenges” and “Exploring new avenues for pharmacologists and toxicologists from employability perspective”	Department of Veterinary Pharmacology and Toxicology, College of Veterinary and Animal Science, Rajasthan University of Veterinary and Animal Sciences, Bikaner, Rajasthan, India	November 02-04, 2023
47.	Dr. Vinay Kant, Assistant Professor	Veterinary Pharmacology and Toxicology	XXIII Annual conference of Indian society of veterinary pharmacology and toxicology and national symposia on “Integrated animal health care system: opportunities and challenges” and “Exploring new avenues for pharmacologists and	Department of Veterinary Pharmacology and Toxicology, College of Veterinary and Animal Science, Rajasthan University of Veterinary and Animal Sciences, Bikaner, Rajasthan, India	November 02-04, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			toxicologists from employability perspective"		
48.	Dr. Jyotsana Madan, Professor	Veterinary Physiology and Biochemistry	International joint conference of association of public health veterinarians (APHV), India and veterinary public health association, Nepal (VPHAN) on "Role of public health veterinarians to achieve health security through one health approach"	Veterinary Public Health Association, Nepal, at Kathmandu, Nepal	September 29-30, 2023
49.	Dr. Surbhi, Assistant Professor	Veterinary Physiology and Biochemistry	VII Annual convention of SVBBI and international symposium on "Multiomics to one health: challenges and way forward in biomedical research"	Division of Biochemistry, ICAR-IVRI, Izatnagar & Society of Veterinary Biochemists and Biotechnologists of India (SVBBI)	December 14-15, 2023
50.	Dr. Surbhi, Assistant Professor	Veterinary Physiology and Biochemistry	24 <sup>th</sup> Indian veterinary congress & 31 <sup>st</sup> Annual conference of Indian association for the advancement of veterinary research (IAAVR) & national symposium on "Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers' livelihood"	Jointly Organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar and Indian Association for The Advancement of Veterinary Research (IAAVR)	February 7-8, 2024
51.	Dr. Shalini Sharma, Assistant Professor	Veterinary Physiology and Biochemistry	VII Annual convention of SVBBI and international symposium on "Multiomics to one health: challenges and way forward in biomedical research"	Division of Biochemistry, ICAR-IVRI, Izatnagar & Society of Veterinary Biochemists and Biotechnologists of India (SVBBI)	December 14-15, 2023
52.	Dr. Pankaj Kumar, ADIO	Veterinary Public Health & Epidemiology	National workshop-cum-training on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry"	Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, COVS, LUVAS, Hisar	September 26-28, 2023
53.	Dr. Pankaj Kumar, ADIO	Veterinary Public Health & Epidemiology	International symposium on "Promotion of one health: opportunities, challenges	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	India in collaboration with Indian Association of Veterinary Public Health Specialists	
54.	Dr. Vandna Bhanot, Sr. DIO	Veterinary Public Health & Epidemiology	International symposium on "Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
55.	Dr. Anand Prakash, ADIO	Veterinary Public Health & Epidemiology	International symposium on "Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)"	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
56.	Dr. Anand Prakash, DIO	Veterinary Public Health & Epidemiology	National workshop-cum-training on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry"	Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, COVS, LUVAS, Hisar	September 26-28, 2023
57.	Dr. Anand Prakash, DIO	Veterinary Public Health & Epidemiology	XXXVI Annual convention cum national conference of Indian Association of Veterinary microbiologists, immunologists and specialists in infectious diseases (IAVMICON-2024) on "Impact of animal Health on one health & national prosperity"	College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur, Rajasthan	June 6-7, 2024
58.	Dr. Chandratre Gauri Arvind, DIO	Veterinary Public Health & Epidemiology	11th International conference of laboratory animal scientists' association (LASA) on "Advancements of 3R's in biomedical research, laboratory animal science and welfare: international perspectives"	Laboratory Animal Scientist's Association (LASA), India	November 07-08, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
59.	Dr. Chandratre Gauri Arvind, DIO	Veterinary Public Health & Epidemiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
60.	Dr. Pallavi Moudgil, Scientist	Veterinary Public Health & Epidemiology	International Symposium International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
61.	Dr. Ramesh Kumar, DIO	Veterinary Public Health & Epidemiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
62.	Dr. Dinesh Mittal, Associate Professor	Veterinary Public Health & Epidemiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
63.	Dr. Manesh Kumar, Assistant Professor	Veterinary Public Health & Epidemiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian association of veterinary public health specialists (IAVPHS)”	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of Veterinary Public Health Specialists	December 7-8, 2023
64.	Dr. Renu Gupta, Sr. DIO	Veterinary Public Health & Epidemiology	International symposium on “Promotion of one health: opportunities, challenges and solutions & XIX Annual conference of Indian	Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar India in collaboration with Indian Association of	December 7-8, 2023





Sr. No.	Name of Faculty member	Department	Conference and Training	Organized by	Period
			association of veterinary public health specialists (IAVPHS)"	Veterinary Public Health Specialists	
65.	Dr. Ram Najar Chaudhary, Professor & Head	Veterinary Surgery & Radiology	Workshop on "Fostering academic leadership in agriculture" (under NAHEP component 2A)	ICAR-National Academy of Agricultural Research Management (NAARM), Hyderabad, India and Faculty Development Centre, GBPUAT, Pantnagar, Uttarakhand	September 04 -08, 2023
66.	Dr. Ram Najar Chaudhary, Professor & Head	Veterinary Surgery & Radiology	46 <sup>th</sup> Annual congress of Indian society for veterinary surgery and national symposium on "Emerging trends in farm, companion and wild animal surgery"	Department of Veterinary Surgery and Radiology, College of Veterinary Science & Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar, Odisha	December 06-08, 2023
67.	Dr. Deepak Kumar Tiwari, Assistant Professor	Veterinary Surgery & Radiology	46 <sup>th</sup> Annual congress of Indian society for veterinary surgery and national symposium on "Emerging trends in farm, companion and wild animal surgery"	Department of Veterinary Surgery and Radiology, College of Veterinary Science & Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar, Odisha	December 06-08, 2023
68.	Dr. Neeraj Arora, Assistant Professor	Veterinary Surgery & Radiology	46 <sup>th</sup> Annual congress of Indian society for veterinary surgery and national symposium on "Emerging trends in farm, companion and wild animal surgery"	Department of Veterinary Surgery and Radiology, College of Veterinary Science & Animal Husbandry, Odisha University of Agriculture and Technology, Bhubaneswar, Odisha	December 06-08, 2023

## B. TRAININGS/SHORT COURSES ATTENDED BY THE FACULTY

Sr. No.	Name of Faculty member	Department	Training/Short Course	Place/Organized by	Period
1.	Dr. Sushil Kumar, Scientist	Animal Nutrition	21 days refresher course on "Computer applications and data analysis"	Academy of Agricultural Research and Education Management (AAREM), DHRM, CCSHAU, Hisar	July 14- August 03, 2023
2.	Dr. Jyotsana, Assistant Professor	Animal Nutrition	Six-days short term face-to-face training programme on Indian Knowledge System (IKS)	UGC in collaboration with IKS at Centre for Professional Development in Higher Education, UGC-HRDC, University of Delhi	October 16-21, 2023





Sr. No.	Name of Faculty member	Department	Training/Short Course	Place/Organized by	Period
3.	Dr. Rajesh, Sr. Scientist	College Central Laboratory	Two days hands on training for Zoonotic diseases diagnostics under Strengthening of the sentinel surveillance sites	NCDC, New Delhi at School of Tropical Medicine, Kolkata for Microbiologists and Laboratory Technician of the Sentinel Surveillance Sites	June 22-23, 2024
4.	Dr. Mahavir Singh, Scientist	College Central Laboratory	Two days hands on training for Zoonotic diseases diagnostics under Strengthening of the sentinel surveillance sites	NCDC, New Delhi at School of Tropical Medicine, Kolkata for Microbiologists and Laboratory Technician of the Sentinel Surveillance Site	June 22-23, 2024
5.	Dr. Mahavir Singh, Scientist	College Central Laboratory	21 days training on "Applied concepts in one health to address zoonoses, antimicrobial resistance and food safety"	Centre for One Health, College of Veterinary Science, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab	February 15 - March 06, 2024
6.	Dr. Rajesh, Sr. Scientist	College Central Laboratory	National consultation for legal environment assessment for one health activities in India	Delhi	June 27-28, 2024
7.	Dr. Sumit Mahajan, Assistant Professor	Dairy, Business Management CoDST	International DAAD alumni training seminar - tropentag conference 2023 on "Biodiversity and food security nexus: species-rich topical forests as core areas for sustainable agriculture	Technical University, Cologne and Humboldt University, Berlin (Germany)	September 12-22, 2023
8.	Dr. Virender Singh Panwar, DEE	Directorate of Extension Education	'Leadership building' for Directors of Extension Education (DEEs) of State Agricultural Universities (SAUs)	ICAR, NAARM, Hyderabad	July 10-12, 2024
9.	Dr. Sarita, Extension Specialist	Directorate of Extension Education	Developing core competence for strengthening the veterinary extension services	ICAR-Indian Veterinary Research Institute, Pune	May 01-03, 2024
10.	Dr. Rajesh Khurana, DHRM	Directorate of Human Resource Management	Academic excellence through strengthening of linkages of National Agricultural Education System for ICAR nodal officers at Agricultural Universities	ICAR, NAARM, Hyderabad	May 28-31, 2024
11.	Dr. Rahul Yadav, Scientist	HPVK Mahendergarh	ICAR sponsored 10 days short course on "Advances	ICAR National Institute of Veterinary Epidemiology and	February 07 - 16, 2024





Sr. No.	Name of Faculty member	Department	Training/Short Course	Place/Organized by	Period
			in GIS applications in epidemiological analysis of livestock diseases in India”	Disease Informatics (NIVEDI), Bengaluru, Karnataka	
12.	Dr. Amit Sangwan, Animal Health Specialist	HPVK Mahendergarh	ICAR sponsored CAFT training programme on “Advances in anaesthesia, surgery and imaging in farm and companion animals”	Department of Veterinary Surgery and Radiology, College of Veterinary Sciences, GADVASU, Ludhiana	January 23 - February 12, 2024
13.	Dr. Jyoti Shunthwal, Scientist	HPVK Mahendergarh	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
14.	Dr. Biswa Ranjan Maharana, Scientist	HPVK, Uchani, Karnal	ICAR sponsored 10 days Short course on “Advances in GIS applications in epidemiological analysis of livestock diseases in India”	ICAR National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru, Karnataka	February 07 - 16, 2024
15.	Dr. Sujoy Khanna	HPVK, Uchani, Karnal	Regional training programme of committee for control and supervision of experiments on animals.	Uchani, Karnal, Haryana	June 20-21, 2024
16.	Dr. Harpreet Singh, Scientist	HPVK, Uchani, Karnal	ICAR sponsored winter school on “Livestock production, GHG emissions and environmental pollutants: mitigation and bioremediation”	ICAR National Institute of Animal Nutrition and Physiology, Adugodi, Bengaluru	January 09 - 29, 2024
17.	Dr. Sujoy Khanna, Assistant Professor	HPVK, Uchani, Karnal	ICAR sponsored winter school on “Livestock production, GHG emissions and environmental pollutants: mitigation and bioremediation”	ICAR National Institute of Animal Nutrition and Physiology, Adugodi, Bengaluru	January 09 - 29, 2024
18.	Dr. Sujoy Khanna, Assistant Professor	HPVK, Uchani, Karnal	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
19.	Dr. Sandeep Potliya, Scientist	HPVK, Uchani, Karnal	ICAR sponsored CAFT training programme on “Advances in anaesthesia, surgery and imaging in farm and companion animals”	Department of Veterinary Surgery and Radiology, College of Veterinary Sciences, GADVASU, Ludhiana	January 23 - February 12, 2024
20.	Dr. Richa, Assistant Professor	Institute of Para Veterinary Sciences	ICAR 36 <sup>th</sup> CAFT course on “Modern diagnostic and control approaches to safeguard livestock health”	Department of Veterinary Microbiology, LUVAS, Hisar	January 4-24, 2024





Sr. No.	Name of Faculty member	Department	Training/Short Course	Place/Organized by	Period
21.	Dr. Sonu Kumari, Assistant Professor	Livestock Farm Complex	Training course on “Applications of molecular biology and synthetic peptides	Department of Animal Biotechnology, LUVAS, Hisar	October 10 - 30, 2023
22.	Dr. Dipin Chander Yadav, Scientist	Livestock Production Management	Six-days short term face-to-face training programme on Indian knowledge system (IKS)	UGC in collaboration with IKS at Centre for Professional Development in Higher Education, UGC-HRDC, University of Delhi	October 16-21, 2023
23.	Dr. Vishal Sharma, Assistant Professor	Livestock Production Management	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
24.	Dr. Parveen Kumar, Assistant Professor	Veterinary Microbiology	21 days training on “Applied concepts in one health to address zoonoses, antimicrobial resistance and food safety”	Centre for One Health, College of Veterinary Science, GADVASU, Ludhiana, Punjab	February 15 - March 06, 2024
25.	Dr. Gaurav Gupta, Assistant Professor	Veterinary Pharmacology	Training course on “Applications of molecular biology and synthetic peptides”	Department of Animal Biotechnology, LUVAS, Hisar	October 10 – 30, 2023
26.	Dr. Vinay Kant, Assistant Professor	Veterinary Pharmacology	Six-days short term face-to-face training programme on Indian knowledge system (IKS)	UGC in collaboration with IKS at Centre for Professional Development in Higher Education, UGC-HRDC, University of Delhi	October 16-21, 2023
27.	Dr. Archana Lohiya, Assistant Professor	Veterinary Pharmacology	Train the trainer event for sustainable agriculture for land restoration”	Kahna Campus, Heartfulness Foundation in Hyderabad	July 1-5, 2024
28.	Dr. Divya Agnihotri, Associate Professor	Veterinary Clinical Complex	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
29.	Dr. Sandeep Saharan, Assistant Professor	Veterinary Clinical Complex	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
30.	Dr. Sneh Lata Chauhan, Scientist	Veterinary Clinical Complex	Research Management	DHRM, CCSHAU, Hisar	April 19- May 9, 2024
31.	Dr. Tarun Kumar, Assistant Professor	Veterinary Clinical Complex	Two days regional training programme of CCSEA	Institute of Microbial Technology (IMTECH), Chandigarh	June 20- 22, 2024





Sr. No.	Name of Faculty member	Department	Training/Short Course	Place/Organized by	Period
32.	Dr. Ravi Dutt, Assistant Professor	Veterinary Gynecology and Obstetrics	ICAR 36 <sup>th</sup> CAFT course on “Modern diagnostic and control approaches to safeguard livestock health”	Department of Veterinary Microbiology, LUVAS, Hisar	January 4-24, 2024
33.	Dr. Jai Bhagwan, Assistant Professor	Veterinary Medicine	ICAR 36 <sup>th</sup> CAFT course on “Modern diagnostic and control approaches to safeguard livestock health”	Department of Veterinary Microbiology, LUVAS, Hisar	January 4-24, 2024
34.	Dr. Ricky Jambh, Assistant Professor	Veterinary Medicine	Veterinary emergency response training (VERU) of trainers	CSKHPKV, Palampur	December 13-16, 2023
35.	Dr. Deepika, Associate Professor	Veterinary Pathology	Train the trainer event for sustainable agriculture for land restoration.	Kahna Campus, Heartfulness Foundation in Hyderabad	July 1-5, 2024
36.	Dr. Surbhi, Assistant Professor	Veterinary Physiology and Biochemistry	Research management	DHRM, CCSHAU, Hisar	April 19- May 9, 2024
37.	Dr. Anand Prakash, ADIO	Veterinary Public Health and Epidemiology	ICAR 36 <sup>th</sup> CAFT course on “Modern diagnostic and control approaches to safeguard livestock health”	Department of Veterinary Microbiology, LUVAS, Hisar	January 4-24, 2024
38.	Dr. Pankaj Kumar, ADIO	Veterinary Public Health and Epidemiology	ICAR sponsored 10 days short course on “Advances in GIS applications in epidemiological analysis of livestock diseases in India”	ICAR National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru, Karnataka	February 07 - 16, 2024
39.	Dr. Priyanka, Assistant Professor	Veterinary Surgery & Radiology	ICAR sponsored CAFT training programme on “Advances in anaesthesia, surgery and imaging in farm and companion animals”	Department of Veterinary Surgery and Radiology, College of Veterinary Sciences, GADVASU, Ludhiana	January 23 - February 12, 2024

### C. TRAINING, WORKSHOP, CONFERENCE ORGANIZED BY LUVAS

Sr. No.	Name of Department	Name of Training/Workshop/Conference Organized	Period	National/International	Venue
1.	Animal Biotechnology	Applications of molecular biology and synthetic peptides	October 10-30, 2023	National	LUVAS, Hisar
2.	Animal Biotechnology	Recent trends in molecular biology and bioinformatics	January 05-25, 2024	National	LUVAS, Hisar
3.	Animal Nutrition	Training for unemployed youth of schedule cast on “Importance of balanced ration and mineral mixture in livestock and poultry”	November 02-08, 2023	State	LUVAS, Hisar





Sr. No.	Name of Department	Name of Training/Workshop/Conference Organized	Period	National/International	Venue
4.	Animal Nutrition	Training for unemployed youth of schedule cast on “Importance of balanced ration and mineral mixture in livestock and poultry”	February 02-08, 2024	State	LUVAS, Hisar
5.	Directorate of Research, LUVAS	Seminar on ‘Role of satellite technology to transform livestock farming’ as convener to celebrate National Science Day	February 28, 2024	National	LUVAS, Hisar
6.	Livestock Farm Complex	3-days National workshop cum training on ‘Scientific pig rearing practices’	March 04-06, 2024	National	LUVAS, Hisar
7.	Livestock Farm Complex	Swine farming: source of livelihood	March 19-20, 2024	State	LUVAS, Hisar
8.	Livestock Farm Complex	One day workshop entitled “Scientific pig farming” under DST-SEED project	March 18, 2024	State	LUVAS, Hisar
9.	Livestock Production Management	National workshop-cum-training on “Buffalo production management”	October 25-27, 2023	National	LUVAS, Hisar
10.	Livestock Production Management	3-days training on “Skill development dairy farming” for SC youth	March 05-07, 2024	State	PVK, Bhiwani
11.	Livestock Production Management	3-days training on “Skill development dairy farming” for SC youth	March 27-29, 2024	State	PVK, Bhiwani
12.	Livestock Products Technology	National workshop cum training on “Development and quality evaluation of functional livestock products”	February 27-29, 2024	National	LUVAS, Hisar
13.	Livestock Products Technology	SC youth training on “Milk and milk products processing”	September 07-16, 2023	State	LUVAS, Hisar
14.	Livestock Products Technology	SC youth training on “Milk and milk products processing”	November 16-25, 2023	State	LUVAS, Hisar
15.	Livestock Products Technology	SC youth training on “Meat and meat products processing”	December 29, 2023- January 08, 2024	State	LUVAS, Hisar
16.	Livestock Products Technology	SC youth training on “Meat and meat products processing”	August 24-September 02, 2023	State	LUVAS, Hisar
17.	Veterinary Animal Husbandry and Extension Education	Online collaborative training programme on “Gender Sensitization of Extension Functionaries”	November 07-09, 2023	National	LUVAS, Hisar
18.	Veterinary Animal Husbandry and Extension Education	One day workshop entitled “Recent Approaches and Experiences in Livestock Development”	May 07, 2024	National	LUVAS, Hisar





Sr. No.	Name of Department	Name of Training/Workshop/Conference Organized	Period	National/International	Venue
19.	Veterinary Clinical Complex	Hands on training in “Diagnostic imaging techniques in veterinary clinical practice”	February 26-28, 2024	National	LUVAS, Hisar
20.	Veterinary Gynaecology and Obstetrics	24 <sup>th</sup> Indian veterinary congress & 31 <sup>st</sup> Annual conference of IAAVR & National symposium on “Livestock health and poultry: a paradigm change to maximize productivity for sustainable farmers’ livelihood”.	February 07-08, 2024	National	LUVAS, Hisar
21.	Veterinary Gynaecology and Obstetrics	National seminar-cum-brainstorming session on “Current status, recent advances and future prospects vis-à-vis potentials and constraints of ETT-IVF technology for bovine breed improvement in Haryana”	March 12, 2024	National	Panchkula, Haryana
22.	Veterinary Microbiology	36 <sup>th</sup> ICAR CAFT course on “Modern diagnostic approaches to safeguard livestock health”	January 04-24, 2024	National	LUVAS, Hisar
23.	Veterinary Microbiology	“Capacity building/ training programme on probang/oropharyngeal fluid (OPF) collection, dispatch, and follow-up of FMD NSP reactors” by LUVAS in collaboration with ICAR-National Institute on FMD, Bhubaneswar	July 25-27, 2023	National	LUVAS, Hisar
24.	Veterinary Pathology and Veterinary Anatomy (jointly)	3-days National workshop-cum-training on “Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry	September 26-28, 2023	National	LUVAS, Hisar
25.	Veterinary Public Health and Epidemiology	XIX Annual conference of Indian Association of Veterinary Public Health Specialists	December 7-8, 2023	International	LUVAS, Hisar
26.	Veterinary Public Health and Epidemiology	Application of chromatographic methods to detect contaminants in food and environmental samples	March 05-17, 2024	National	LUVAS, Hisar
27.	Veterinary Surgery & Radiology	Training on “Advanced diagnostics and therapeutics in veterinary ophthalmology”	April 01-06, 2024	National	LUVAS, Hisar





## PATENTS, AWARDS AND HONORS

### AWARDS RECEIVED BY FACULTY

Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
1.	Dr. Aman Kumar Dr. Sushila Maan	Animal Biotechnology	Certificate of Appreciation	Worthy Vice-chancellor, LUVAS, Hisar for grant of patent	February 14, 2023
2.	Dr. Aman Kumar Dr. Sushila Maan	Animal Biotechnology	Best Research Paper Award	Indian Journal of Veterinary Science and Biotechnology	October 5, 2023
3.	Dr. Kanisht Batra	Animal Biotechnology	Prof (Dr) Rishendra Verma Young Scientist Award-2024	National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" held at LUVAS, Hisar	February 7-8, 2024
4.	Dr. Aman Kumar Dr. Sushila Maan Dr. Joshi, V.G.	Animal Biotechnology	1 <sup>st</sup> Oral Presentation Award	IAAVAR at LUVAS, Hisar	February 7-8, 2024
5.	Dr. Kanisht Batra Dr. Aman Kumar Dr. Sushila Maan	Animal Biotechnology	1 <sup>st</sup> Oral Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists (IAVPHS) organized by Department of Veterinary Public Health & Epidemiology, LUVAS, Hisar	December 7-8, 2023
6.	Dr. Sushila Maan Dr. Aman Kumar Dr. Kanisht Batra	Animal Biotechnology	1 <sup>st</sup> Oral Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists (IAVPHS) organized by Department of Veterinary Public Health & Epidemiology, LUVAS, Hisar	December 7-8, 2023
7.	Dr. Kanisht Batra Dr. Sushila Maan	Animal Biotechnology	1 <sup>st</sup> Oral Presentation Award	National Conference at Udaipur, Rajasthan	June 6-7, 2024
8.	Dr. Kanisht Batra Dr. Sushila Maan	Animal Biotechnology	Oral Presentation Award	31 <sup>st</sup> Annual Conference of IAAVR & National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers"	February 7-8, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
				“Livelihood” held at LUVAS, Hisar	
9.	Dr. Pawan Kumar Dr. V.G Joshi Dr. Naresh Jindal Dr. Ayusha	Animal Biotechnology	Oral Presentation Award	Annual conference of IAAVR 2024 & National symposium on “Livestock health and poultry: A paradigm changes to maximize productivity for sustainable farmer’s livelihood”, held at LUVAS, Hisar	February 7-8, 2024
10.	Dr. Poonam Ratwan	Animal Genetics & Breeding	Savitribai Phule Excellence Award 2024	National Level Essay Writing Competition conducted by Pashudhan Praharee	January, 2024
11.	Dr. D.S. Gonge Dr. A.K. Gupta Dr. Poonam Ratwan	Animal Genetics & Breeding	3 <sup>rd</sup> Best Oral Presentation Award	X Annual convention of the Society for Veterinary Sciences and Biotechnology (SVSBT) and National Symposium on Recent Biotechnological Advances in Health and Management of Livestock, Poultry and companion animals by College of Veterinary Sciences and Animal Husbandry, Mhow	October 5 - 7, 2023
12.	Dr. D.S. Gonge Dr. A.K. Gupta Dr. A.K. Pandey Dr. Poonam Ratwan	Animal Genetics & Breeding	3 <sup>rd</sup> Best Poster Presentation Award	X Annual convention of the Society for Veterinary Sciences and Biotechnology (SVSBT) and National Symposium on Recent Biotechnological Advances in Health and Management of Livestock, Poultry and companion animals by College of Veterinary Sciences and Animal Husbandry, Mhow	October 5 - 7, 2024
13.	Dr. Sonu Kumari Dr. Sudarshan Kumar Dr. Manoj Kumar Dr. Poonam Ratwan	Animal Genetics & Breeding	2 <sup>nd</sup> Best Poster Presentation Award	24 <sup>th</sup> Indian Veterinary Congress, 31 <sup>st</sup> Annual conference of IAAVR and National Symposium on “Livestock Health and Poultry: A paradigm change to maximize productivity for Sustainable Farmers’ Livelihood” at LUVAS, Hisar	February 7-8, 2024
14.	Dr. Poonam Ratwan	Animal Genetics & Breeding	Certificate of Appreciation	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists (IAVPHSCON -2023) and International Symposium on “Promotion of	December 7-8, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
				One Health: Opportunities, Challenges and Solutions "organized at LUVAS, Hisar	
15.	Dr. Rachna Dr. Gautam Dr. Shalini Arora Dr. Anika Malik Dr. Sarita	College of Dairy Science and Technology	1 <sup>st</sup> Best Poster Presentation	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" at LUVAS, Hisar	February 7-8, 2024
16.	Dr. Indu Dr. Sumit Mahajan Dr. Sharanagouda B. Dr. Manoj and Dr. Kumar, V.	College of Dairy Science and Technology	1 <sup>st</sup> Best Poster Presentation	50 <sup>th</sup> Dairy Industry Conference on "Indian Dairying: Innovation and Entrepreneurship" organized by Indian Dairy Association (South Zone) & IDA-Telangana at HITEX Exhibition center, Izzat Nagar Hyderabad 500084, Telangana, India	March, 04-06, 2024
17.	Dr. Sujoy Khanna Dr. Sandeep Potliya Dr. Anita Ganguly Dr. Harpreet Singh Dr. B.R. Maharana Dr. Davinder Singh Dr. G.R. Gowane Dr. Lohit Sharma	HPVK, Karnal	Best Oral Presentation Award	9 <sup>th</sup> International Conference on Current Approaches in Agricultural, Biological & Applied Sciences for Sustainable Development at Kumaun University, Nainital, Uttarakhand, India	March 1-3, 2024
18.	Dr. B.R. Maharana	HPVK, Karnal	Best Oral Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	December 29, 2023-January 1, 2024
19.	Dr. B.R. Maharana	HPVK, Karnal	Best Poster Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	December 29, 2023-January 1, 2024
20.	Dr. Ankit Kumar	HPVK, Karnal	Best Poster Presentation Award	Indian Society for Veterinary Medicine	February 22-24, 2024
21.	Dr. Harpreet Singh	HPVK, Karnal	Best oral presentation award	Indian Society for Study of Animal Reproduction	December 6-8, 2023
22.	Dr. Harpreet Singh	HPVK, Karnal	International Travel Grant	DST Haryana	May 14-18, 2024
23.	Dr. Harpreet Singh	HPVK, Karnal	Best poster presentation award	Indian Association for Advancement of Veterinary Research	February 07-08, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
24.	Dr. Ankit Kumar	HPVK, Karnal	Ram Singh Memorial National Animal Welfare Award 2023	Ram Singh Memorial National Animal Welfare Foundation	July, 2023
25.	Dr. Rahul Yadav	HPVK, Mahendergarh	3 <sup>rd</sup> Best Poster Presentation	Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases	April, 2024
26.	Dr. Sonu Kumari	Livestock Farm Complex	1 <sup>st</sup> Best Poster Award	31 <sup>st</sup> Annual conference of IAAVR & National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers Livelihood" at LUVAS, Hisar	February 7-8, 2024
27.	Dr. M. Singh Dr. N. Singh Dr. Amandeep Dr. D.S. Bidhan Dr. Vishal Sharma Dr. S. Dhillod Dr. D.C. Yadav Dr. S. Chandra	Livestock Production Management	Best Poster Presentation Award	XXI NAVS convocation-cum-scientific convention On: Strategies for enhancing Productivity of Dairy animals" organized by GADVASU, Ludhiana	July 1-2, 2023
28.	Dr. M. Singh Dr. D.S. Bidhan Dr. S.K. Chhikara Dr. V. Sharma Dr. S. Dhillod Dr. D.C. Yadav Dr. N. Singh Dr. Amandeep	Livestock Production Management	2 <sup>nd</sup> Best Poster Presentation	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" at LUVAS, Hisar	February 07-08, 2024
29.	Dr. Dipin Chander Yadav	Livestock Production Management	Best Poster Presentation Award	XXI NAVS convocation-cum-scientific convention on "Strategies for enhancing productivity of dairy animals" jointly organized by GADVASU and NAVS	July 1-2, 2023
30.	Dr. Dipin Chander Yadav	Livestock Production Management	Poster Presentation Award	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" at LUVAS, Hisar	February 7-8, 2024
31.	Dr. M. Singh Dr. D.S. Bidhan Dr. S.K. Chhikara	Livestock Production Management	Poster Presentation Award	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium	February 7-8, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
	Dr. V. Sharma Dr. S. Dhillod Dr. D.C. Yadav Dr. N. Singh Dr. Amandeep			on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" at LUVAS, Hisar	
32.	Dr. Amandeep Singh	Veterinary Anatomy	National Faculty Award 2023-2024	Ministry of MSME, Govt., of India	December, 2023
33.	Dr. Amandeep Singh	Veterinary Anatomy	Recognition of Top Cited Article	Wiley's Anatomia, Histologia, Embryologia	June, 2024
34.	Dr. Amandeep Singh	Veterinary Anatomy	Best Article Award	Veterinary Today International	April, 2024
35.	Dr. Amandeep Singh	Veterinary Anatomy	Dr. V. Kurien's "Award of Excellence-2024"	Pashudhan Praharee	June, 2024
36.	Dr. Anika Malik	Veterinary Animal Husbandry and Extension Education	Best Oral Presentation Award	Society for Veterinary and Animal Husbandry Extension	October 12-14, 2023
37.	Dr. Anika Malik	Veterinary Animal Husbandry and Extension Education	Remarkable Research Work Award	Society of Extension Education, Agra, India	December 18-20, 2023
38.	Dr. Sandeep Saharan Dr. Alpa Dr. Amit Kumar Dr. D.K. Tiwari Dr. N. Arora Dr. Maneesh Sharma Dr. G. Kumar Dr. G. Singh	Veterinary Clinical Complex	1 <sup>st</sup> Best Oral Presentation	2 <sup>nd</sup> Veterinary and animal science congress & 2 <sup>nd</sup> annual convention of association of animal scientists & national symposium at Apollo college of Veterinary medicine, Jaipur	February 17-19, 2024
39.	Dr. Sandeep Saharan, Dr. Amit Kumar Dr. Alpa Dr. D.K. Tiwari Dr. N. Arora Dr. Maneesh Sharma Dr. G. Singh	Veterinary Clinical Complex	1 <sup>st</sup> Best Oral Presentation	2 <sup>nd</sup> Veterinary and Animal Science Congress & 2 <sup>nd</sup> Annual Convention of Association of Animal Scientists & national symposium at Apollo college of Veterinary medicine, Jaipur	February 17-19, 2024
40.	Dr. Sandeep Saharan Dr. Amit Kumar Dr. Alpa Dr. P. Saini Dr. Shivam Dr. Maneesh Sharma Dr. Ravi Dutt	Veterinary Clinical Complex	2 <sup>nd</sup> Best Poster Presentation	24 <sup>th</sup> Indian veterinary congress, 31 <sup>st</sup> annual conference of IAAVR & National symposium, LUVAS, Hisar	February 7-8, 2024
41.	Dr. Vivek Dr. Neelesh Sindhu Dr. Pooja	Veterinary Clinical Complex	3 <sup>rd</sup> Best Oral Presentation	4 <sup>th</sup> Annual Convention of VIPM and National Symposium, on Advancing Veterinary Medicine	December 18-19, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
	Dr. Sunil Punia Dr. Maneesh Sharma Dr. Divya Agnihotri Dr. Tarun Kumar			for Holistic Development of Animal Health and productivity with a one health approach" organized by F.V.Sc & A.H., SKAUST, Jammu	
42.	Dr. Tarun Kumar Dr. Neelesh Sindhu Dr. Dinesh Khohal Dr. Ankit Kumar, Dr. Pooja Dr. Maneesh Sharma Dr. Rajender Kumar	Veterinary Clinical Complex	1 <sup>st</sup> Best Oral Presentation	40 <sup>th</sup> Annual Convention of ISVM and National Symposium on Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future" at Mannuthy, Kerala	February 22-24, 2024
43.	Dr. Vivek Dr. Neelesh Sindhu Dr. Pooja Dr. Sunil Punia Dr. Maneesh Sharma Dr. Divya Agnihotri Dr. Tarun Kumar	Veterinary Clinical Complex	3 <sup>rd</sup> Best Oral Presentation	4 <sup>th</sup> Annual Convention of VIPM and National Symposium, on Advancing Veterinary Medicine for Holistic Development of Animal Health and productivity with a One health Approach" organized by F.V.Sc &A.H., SKAUST, Jammu	December 18-19, 2023
44.	Dr. Annu Yadav Dr. Tarun Kumar Dr. Maneesh Sharma Dr. Dipin Chander Yadav Dr. Neelesh Sindhu	Veterinary Clinical Complex	2 <sup>nd</sup> Best Oral Presentation	4 <sup>th</sup> Annual Convention of VIPM and National Symposium, on Advancing Veterinary Medicine for Holistic Development of Animal Health and productivity with a One health Approach" organized by F.V.Sc &A.H., SKAUST, Jammu	December 18-19, 2023
45.	Dr. Shivika Gupta Dr. Pooja Dr. Neelesh Sindhu Dr. Tarun Kumar Dr. Ankit Kumar Dr. Maneesh Sharma Dr. Gyan Singh	Veterinary Clinical Complex	2 <sup>nd</sup> Best Oral Presentation	31 <sup>st</sup> annual conference of IAAVR & National symposium on Livestock Health and Poultry: A Paradigm change to maximize Productivity for Sustainable Farmer's Livelihood, LUVAS, Hisar	February 7-8, 2024
46.	Dr. Shivika Gupta Dr. Pooja Dr. Maneesh Sharma Dr. Tarun Kumar Dr. Divya Agnihotri Dr. Neelesh Sindhu	Veterinary Clinical Complex	2 <sup>nd</sup> Best Poster Presentation	4 <sup>th</sup> Annual Convention of VIPM and National Symposium, on Advancing Veterinary Medicine for Holistic Development of Animal Health and productivity with a One health Approach" organized by F.V.Sc &A.H., SKAUST, Jammu	December 18-19, 2023
47.	Dr. Pooja Dr. Tarun Kumar Dr. Shivika Gupta Dr. Ankit Kumar Dr. Dinesh Khohal	Veterinary Clinical Complex	3 <sup>rd</sup> Best Poster Presentation	31 <sup>st</sup> annual conference of IAAVR & National symposium on Livestock Health and Poultry: A Paradigm change to maximize Productivity for Sustainable	February 7-8, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
	Dr. Aman Kumar Dr. Neelesh Sindhu			Farmer's Livelihood organised by LUVAS, Hisar	
48.	Dr. R. Dutt, Dr. Amandeep Dr. M. Kumar, Dr. Naveen Dr. Vishal, Dr. Rahul Dr. S. Jinagal Dr. Jasmer Dalal, Dr. Anil	Veterinary Gynaecology and Obstetrics	Innovative Article Award	Science Word e-Magazine	August, 2023
49.	Dr. Anand Kumar Pandey	Veterinary Gynaecology and Obstetrics	Dr. N. C. Sharma Memorial Award	39 <sup>th</sup> annual convention of ISSAR & National symposium on "Challenges in enhancing reproductive efficiency of livestock: An Indian perspective" organised by GADVASU, Ludhiana	November 29-December 1, 2024
50.	Dr. Anand Kumar Pandey	Veterinary Gynaecology and Obstetrics	Professor Ram Raksha Kiran Shukla award 2024"	31 <sup>st</sup> annual conference of IAAVR & National symposium on "Livestock Health and Poultry: A Paradigm change to maximize Productivity for Sustainable Farmer's Livelihood" organised by LUVAS, Hisar	February 7-8, 2024
51.	Dr. N. Kumar Dr. R. Dutt Dr. Gyan Singh Dr. Jasmer Dalal Dr. M. Kumar Dr. Amandeep Dr. Rahul Dr. Anil Dr. Vishal	Veterinary Gynaecology and Obstetrics	3 <sup>rd</sup> Best Poster Award	X <sup>th</sup> Annual Convention of the Society of Veterinary Science and Biotechnology (SVSBT) and National Symposium on "Recent Biotechnological Advances in Health, and Management of Livestock, Poultry & Companion Animals" organized by College of Veterinary Science & AH, Mhow, Indore, M.P.	October 5-7, 2023
52.	Dr. Sujata Jinagal Dr. Ravi Dutt Dr. M. Sharma Dr. S. Saini Dr. S. Chaudhary Dr. M. Punetha Dr. S. Thakur Dr. D. Kumar Dr. P.S. Yadav	Veterinary Gynaecology and Obstetrics	3 <sup>rd</sup> Best Poster Award	National Conference of Indian Society for Buffalo Development and Symposium on "Modern approaches for sustainable buffalo production in the scenario of climate change" organised by DUVASU Mathura (U.P)	October 27-28, 2023
53.	Dr. Usha Yadav Dr. Sujata Jinagal Dr. Ravi Dutt	Veterinary Gynaecology and Obstetrics	1 <sup>st</sup> Best Poster Award	31 <sup>st</sup> Annual conference of IAAVR & National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers Livelihood" organized by LUVAS, Hisar	February 7-8, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
54.	Dr. N. Kumar Dr. Vishal Dr. Ravi Dutt Dr. Gyan Singh Dr. S. Kumar Dr. A.K. Pandey Dr. Anil Dr. Amandeep	Veterinary Gynaecology and Obstetrics	1 <sup>st</sup> Best Poster Award	31 <sup>st</sup> Annual conference of IAAVR & National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers Livelihood" organized by LUVAS, Hisar	February 7-8, 2024
55.	Dr. M. Kumar Dr. Amandeep Dr. Jasmer Dr. Ravi Dutt Dr. A.K. Pandey Dr. S. Kumar Dr. Gyan Singh	Veterinary Gynaecology and Obstetrics	3 <sup>rd</sup> Best Poster Award	31 <sup>st</sup> Annual conference of IAAVR & National Symposium on "Livestock Health and Poultry: A paradigm change to maximize Productivity for Sustainable Farmers Livelihood" organized by LUVAS, Hisar	February 7-8, 2024
56.	Dr. Akhil Kumar Gupta	Veterinary Microbiology	2 <sup>nd</sup> Oral Presentation Award	Indian Association of Veterinary Public Health Specialists (IAVPHS)	December 7-8, 2023
57.	Dr. Akhil Kumar Gupta	Veterinary Microbiology	2 <sup>nd</sup> Oral Presentation Award	IAVMICON-2024	June 6-7, 2024
58.	Dr. Akhil Kumar Gupta	Veterinary Microbiology	3 <sup>rd</sup> Poster Presentation Award	IAVMICON-2024	June 6-7, 2024
59.	Dr. Akhil Kumar Gupta	Veterinary Microbiology	2 <sup>nd</sup> Oral Presentation Award	Indian Association of Veterinary Public Health Specialists (IAVPHS)	December 7-8, 2023
60.	Dr. Akhil Kumar Gupta	Veterinary Microbiology	2 <sup>nd</sup> Oral Presentation Award	Indian Association of Veterinary Public Health Specialists (IAVPHS)	December 7-8, 2023
61.	Dr. Vandna Bhanot	Veterinary Microbiology	3 <sup>rd</sup> Best Oral Presentation Award	International symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" and XIX Annual conference of Indian Association of Veterinary Public Health Specialist organized by Dept. of VPHE, LUVAS, Hisar	December 7-8, 2023
62.	Dr. Vandna Bhanot	Veterinary Microbiology	3 <sup>rd</sup> Best Poster Presentation Award	International symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" and XIX Annual conference of Indian Association of Veterinary Public Health Specialist organized by Dept. of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
63.	Dr. Jasleen Kaur Dr. Anshul Lather Dr. Vinay G. Joshi Dr. Babu Lal Jangir Dr. Rajesh Chhabra	Veterinary Microbiology	2 <sup>nd</sup> Best Oral Presentation	International symposium on “Promotion of One Health: Opportunities, Challenges and Solutions” and XIX Annual conference of Indian Association of Veterinary Public Health Specialist Organized by Dept. of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023
64.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Sessions (I and II) of one day Seminar on “Success Stories of Entrepreneurs: Innovation Horizons for Veterinary & Dairy Technology Students”	Institutional Innovation Council, DHRM, LUVAS, Hisar	July 20, 2023
65.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Session of the Seminar on “Veterinary Entrepreneurs: Transforming Ideas into Business -A Road Map”	Institutional Innovation Council, DHRM, LUVAS, Hisar	September 02, 2023
66.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Session of the Seminar on “Celebrating the Successful landing of Chandrayan-III in South pole of the Moon”	Institutional Innovation Council, DHRM, LUVAS, Hisar	September 08, 2023
67.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Session of “Meeting on Indian Livestock-farming between Academicians from LUVAS, Hisar and NIAB, Hyderabad Scientists (MILAN)”	Technology Incubation Centre, DHRM, LUVAS, Hisar and National Institute of Animal Biotechnology, Hyderabad	October 10, 2023
68.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Session of one day Seminar on “Sharing experiences in Development of LSD Vaccine and Role of IPR in entrepreneurship”	Institutional Innovation Council, DHRM, LUVAS, Hisar	November 10, 2023
69.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Co-Chairman during the Technical Session of XIX Annual Conference of IAVPHS and International Symposium on Promotion	LUVAS, Hisar	December 7-8, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
			of One Health: Opportunities, Challenges and Solutions		
71.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Chairman during the Technical Sessions of one day Seminar on "World Intellectual Property Day"	Institutional Innovation Council, DHRM, and IPR Management and Commercialization Unit, DHRM, LUVAS, Hisar	April 26, 2024
72.	Dr. Naresh Kumar Kakker	Veterinary Microbiology	Chairman during the Technical Sessions of one day Seminar on the occasion of National Science Day–2024 "Role of Satellite Technology to Transform Livestock Farming"	Directorate of Research and Institutional Innovation Council, DHRM, LUVAS, Hisar	April 28, 2024
73.	Dr. Snehil Gupta	Veterinary Parasitology	2 <sup>nd</sup> Best Oral Paper Presentation	Indian Association of Veterinary Public Health Specialists (IAVPHS)	December 7-8, 2023
74.	Dr. Snehil Gupta	Veterinary Parasitology	3 <sup>rd</sup> Best Oral Paper Presentation	31 <sup>st</sup> Annual conference of IAAVR & National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers Livelihood" at LUVAS, Hisar	February 7-8, 2024
75.	Dr. Snehil Gupta	Veterinary Parasitology	2 <sup>nd</sup> Best Oral Paper Presentation	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by VPHE, LUVAS, Hisar	December 7-8, 2023
76.	Dr. Aman D. Moudgil	Veterinary Parasitology	ESCMID Outreach Grant 2024	ESCMID, Switzerland	April, 2024
77.	Dr. Aman D. Moudgil	Veterinary Parasitology	2 <sup>nd</sup> Best Poster Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by VPHE, LUVAS, Hisar	December 7-8, 2023
78.	Dr. Aman D. Moudgil	Veterinary Parasitology	1 <sup>st</sup> Best Poster Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	November 29-December 1, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
79.	Dr. Anil Kumar	Veterinary Parasitology	1 <sup>st</sup> Poster Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	November 29-December 1, 2023
80.	Dr. Anil Kumar	Veterinary Parasitology	1 <sup>st</sup> Oral Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	November 29-December 1, 2023
81.	Dr. Anil Kumar	Veterinary Parasitology	2 <sup>nd</sup> Oral Presentation Award	Indian Association for the Advancement of Veterinary Parasitology	November 29-December 1, 2023
82.	Dr. Anil Kumar	Veterinary Parasitology	2 <sup>nd</sup> Poster Presentation Award	Indian Association of Veterinary Public Health Specialists (IAVPHS)	December 7-8, 2023
83.	Dr. Arju Dr. Babu Lal Jangir Dr. Manesh Kumar Dr. Preeti	Veterinary Pathology	3 <sup>rd</sup> Best Poster Presentation	XIX Annual conference of Indian Association of Veterinary Public Health Specialist (IAVPHS) organized by Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023
84.	Dr. Arju Dr. Babu Lal Jangir Dr. Manesh Kumar	Veterinary Pathology	3 <sup>rd</sup> Best Oral Presentation	International symposium on “Promotion of One Health: Opportunities, Challenges and Solutions” and XIX Annual conference of Indian Association of Veterinary Public Health Specialist organized by Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023
85.	Dr. Rakshita Sharma Dr. Gulshan Narang Dr. Babu Lal Jangir Dr. Paras Saini Dr. Aman Kumar Dr. Ankit Magotra	Veterinary Pathology	3 <sup>rd</sup> Best Oral Presentation	International symposium on “Promotion of One Health: Opportunities, Challenges and Solutions” and XIX Annual conference of Indian Association of Veterinary Public Health Specialist organized by Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar	December 7-8, 2023
86.	Dr. Diksha Kandpal Dr. Diksha Sharma Dr. Rakshita Sharma Dr. Paras Saini Dr. Deepika Lather Dr. Vikas Nehra Dr. Maneesh Sharma	Veterinary Pathology	3 <sup>rd</sup> Best Oral Presentation	International symposium on “Promotion of One Health: Opportunities, Challenges and Solutions” and XIX Annual conference of Indian Association of Veterinary Public Health Specialist (IAVPHS) organized	December 7-8, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
	Dr. Babu Lal Jangir Dr. Sushma Dr. Gauri A. Chandratre Dr. Gulshan Narang			by Department of Veterinary Public Health and Epidemiology, LUVAS, Hisar	
87.	Dr. M. Sharma Dr. T. Kumar Dr. B.L. Jangir Dr. D. Agnihotri Dr. S. Saharan Dr. D. Lather Dr. N. Sindhu Dr. S.L. Chauhan Dr. G. Singh	Veterinary Pathology	1 <sup>st</sup> Best Poster Presentation	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" organised by LUVAS, Hisar	February 7-8, 2024
88.	Dr. Rakshita Sharma Dr. Babu Lal Jangir Dr. Gulshan Narang Dr. Paras Saini Dr. Ankit Magotra Dr. Vikas Nehra	Veterinary Pathology	3 <sup>rd</sup> Best Oral Presentation	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" organised by LUVAS, Hisar	February 7-8, 2024
89.	Dr. Sushma Kajal Dr. Snehil Gupta Dr. Surbhi Gupta Dr. Babu Lal Jangir	Veterinary Pathology	2 <sup>nd</sup> Best Poster Presentation	24 <sup>th</sup> Indian Veterinary Congress and 31 <sup>st</sup> Annual Conference of IAAVR and National Symposium on "Livestock Health and Poultry: A Paradigm Change to Maximize Productivity for Sustainable Farmers' Livelihood" organised by LUVAS, Hisar	February 7-8, 2024
90.	Dr. Rakshita Sharma Dr. B.L. Jangir Dr. Gulshan Narang Dr. Paras Saini Dr. Ankit Magotra Dr. Deepika Lather	Veterinary Pathology	Best Poster Presentation Award	Indian Association of Veterinary Pathologists, Indian College of Veterinary Pathologists at Centre for Animal Disease Research and Diagnosis (CADRAD, ICAR -Indian Veterinary Research Institute Izatnagar, Bareilly, Uttar Pradesh, India	December 20-22, 2023
91.	Dr. Surbhi	Veterinary Physiology and Biochemistry	Oral Presentation	Society of Veterinary Biochemist and Biotechnologist	December 14-15, 2023
92.	Dr. Surbhi	Veterinary Physiology and Biochemistry	Oral Presentation	24 <sup>th</sup> Indian veterinary congress & 31 <sup>st</sup> Annual conference of Indian association for the advancement of veterinary research (IAAVR) organized by LUVAS, Hisar	February 7-8, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
93.	Dr. Pallavi Moudgil	Veterinary Public Health and Epidemiology	ESGCP Travel Grant Award	ESCMID, Switzerland	April, 2024
94.	Dr. Pallavi Moudgil	Veterinary Public Health and Epidemiology	2 <sup>nd</sup> Best Poster Presentation	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar	December 7-8, 2023
95.	Dr. Pallavi Moudgil	Veterinary Public Health and Epidemiology	3 <sup>rd</sup> Best Poster Presentation	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar.	December 7-8, 2023
96.	Dr. Ramesh Kumar	Veterinary Public Health and Epidemiology	1 <sup>st</sup> Best Oral Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar	December 7-8, 2023
97.	Dr. Pankaj Kumar	Veterinary Public Health and Epidemiology	3 <sup>rd</sup> Best Poster Presentation	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar.	December 7-8, 2023
98.	Dr. Pankaj Kumar	Veterinary Public Health and Epidemiology	2 <sup>nd</sup> Best Poster Presentation	Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases	April, 2024
99.	Dr. Pankaj Kumar	Veterinary Public Health and Epidemiology	2 <sup>nd</sup> Best Oral Presentation	Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases	April, 2024
100.	Dr. K. Grakh Dr. V.G. Joshi Dr. V.J. Jadhav	Veterinary Public Health and Epidemiology	1 <sup>st</sup> Best Poster Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National	December 7-8, 2023





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
	Dr. D. Mittal Dr. N. Jindal			Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar	
101.	Dr. K. Grakh Dr. V.J. Jadhav Dr. V.G. Joshi Dr. N. Jindal	Veterinary Public Health and Epidemiology	3 <sup>rd</sup> Best Poster Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar	December 7-8, 2023
102.	Dr. A. Nagpal Dr. R. Khurana Dr. V.J. Jadhav Dr. M. Kumar	Veterinary Public Health and Epidemiology	1 <sup>st</sup> Best Poster Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar.	December 7-8, 2023
103.	Dr. M. Kumar Dr. V.J. Jadhav Dr. D. Mittal Dr. K. Grakh Dr. R. Kumar Dr. R. Gupta Dr. P. Moudgil Dr. R. Khurana Dr. N. Jindal	Veterinary Public Health and Epidemiology	1 <sup>st</sup> Best Oral Presentation Award	XIX Annual Conference of Indian Association of Veterinary Public Health Specialists and National Symposium on "Promotion of One Health: Opportunities, Challenges and Solutions" organized by LUVAS, Hisar.	December 7-8, 2023
104.	Dr. Anand Prakash	Veterinary Public Health and Epidemiology	2 <sup>nd</sup> Best Poster Presentation	XXXVI Annual convention cum national conference of Indian Association of Veterinary microbiologists, immunologists and specialists in infectious diseases (IAVMICON-2024) organized by College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur, Rajasthan	June 6-7, 2024
105.	Dr. Anand Prakash	Veterinary Public Health and Epidemiology	3 <sup>rd</sup> Best Poster Presentation	XXXVI Annual convention cum national conference of Indian Association of Veterinary microbiologists, immunologists and specialists in infectious diseases (IAVMICON-2024) organized by College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur, Rajasthan	June 6-7, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
106.	Dr. R.N. Chaudhary	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper Presentation	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
107.	Dr. R.N. Chaudhary	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper Presentation	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
108.	Dr. Deepak Kumar Tiwari	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper Presentation	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
109.	Dr. Deepak Kumar Tiwari	Veterinary Surgery & Radiology	“Appreciation Award” for Best Poster Presentation	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
110.	Dr. Deepak Kumar Tiwari	Veterinary Surgery & Radiology	1 <sup>st</sup> Best Research Paper	Association of Animal Scientists (AAS)	February 17-19, 2024
111.	Dr. Deepak Kumar Tiwari	Veterinary Surgery & Radiology	1 <sup>st</sup> Best Research Paper	Association of Animal Scientists (AAS)	February 17-19, 2024
112.	Dr. Deepak Kumar Tiwari	Veterinary Surgery & Radiology	2 <sup>nd</sup> Best Poster Presentation	Association of Animal Scientists (AAS)	February 17-19, 2024
113.	Dr. Neeraj Arora	Veterinary Surgery & Radiology	“Appreciation Award” for Best Poster	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
114.	Dr. Neeraj Arora	Veterinary Surgery & Radiology	1 <sup>st</sup> Best Research Paper (Clinical Science Session)	Association of Animal Scientists (AAS)	February 17-19, 2024
115.	Dr. Neeraj Arora	Veterinary Surgery & Radiology	1 <sup>st</sup> Best Research Paper	Association of Animal Scientists (AAS)	February 17-19, 2024
116.	Dr. Neeraj Arora	Veterinary Surgery & Radiology	1 <sup>st</sup> Best Research Paper (Wildlife session)	Association of Animal Scientists (AAS)	February 17-19, 2024





Sr. No.	Name of Faculty Member	Department	Name of Award	Awarding Organization	Date(s)
117.	Dr. Neeraj Arora	Veterinary Surgery & Radiology	2 <sup>nd</sup> Best Poster Presentation	Association of Animal Scientists (AAS)	February 17-19, 2024
118.	Dr. Ram Niwas	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
119.	Dr. Dinesh	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
120.	Dr. Dinesh	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023
121.	Dr. Priyanka	Veterinary Surgery & Radiology	“Appreciation Award” for Best Research Paper	46 <sup>th</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Emerging Trends in Farm, Companion and Wild Animal Surgery” at Orissa	December 06-08, 2023

## HONORS TO THE FACULTY

Sr. No.	Name of Faculty Member	Department	Honour
1.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, National Academic Depository
2.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, Indian Council of Agricultural Research (ICAR)
3.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, Association of Commonwealth Universities
4.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, Indian Agricultural Universities Association (IAUA)
5.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, National Institute of Ranking Framework
6.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, Indian Council of Agricultural Research (ICAR) e-learning educational portal





Sr. No.	Name of Faculty Member	Department	Honour
7.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, Agricultural Universities Ranking System for ranking of agricultural universities
8.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, ICAR-National Academy of Agricultural Research Management (NAARM) Science & Technology (S&T)
9.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Nodal Officer, State Training Council for implementation of Haryana State Training Policy (HIPA)
10.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Chairman, Intellectual Property Rights Management and Commercialization Unit (IRRM & C)
11.	Dr. Rajesh Khurana	Directorate of Human Resource Management	Coordinator, Internal Quality Assurance Cell (IQAC)
12.	Dr. Naresh Jindal	Directorate of Research	Nodal Officer, National Assessment and Accreditation Council (NAAC)
13.	Dr. Sandeep Kumar	Veterinary Gynaecology and Obstetrics	Nodal Officer, Association of Indian Universities
14.	Dr. Sandeep Kumar	Veterinary Gynaecology and Obstetrics	Nodal Officer, All India Survey of Higher Education (AISHE) Cell
15.	Dr. Sandeep Gupta	Veterinary Physiology and Biochemistry	Nodal Officer, ICAR AU-GRMS (Grievance Redressal Mechanism System)
16.	Dr. Sandeep Gupta	Veterinary Physiology and Biochemistry	Nodal Officer, RTI cell
17.	Dr. Vinay Kant	Veterinary Pharmacology and Toxicology	Nodal Officer, Ethno Veterinary Practices
18.	Dr. Parveen Kumar	Veterinary Microbiology	Nodal Officer, Reservation cell of SC/ST
19.	Dr. Amandeep Singh	Veterinary Anatomy	Nodal Officer, Minority Cell
20.	Dr. Sanjay Yadav	Livestock Products Technology	Nodal Officer, OBC Cell
21.	Dr. Sonia Sindhu	Veterinary Physiology and Biochemistry	Chairperson, Women Cell
22.	Dr. Renu Gupta	Veterinary Public Health and Epidemiology	Nodal Officer, Student Counselling and Placement Cell
23.	Dr. Sajjan Sihag	Animal Nutrition	Nodal Officer to coordinate all activities to be conducted under the theme of International Year of Millet 2023
24.	Dr. Sukhdeep Vohra	Veterinary Parasitology	Nodal Officer, DVLT
25.	Dr. Sarita	Directorate Extension Education	Nodal Officer, Community Radio Station





Sr. No.	Name of Faculty Member	Department	Honour
26.	Dr. Gulshan Narang	Dean, College of Veterinary Sciences	Nodal officer of Blended Learning Platform under Resilient Agriculture Education System (RAES) under NAHEP
27.	Dr. Shalini Arora	College of Dairy Science and Technology	Nodal Officer, Technology Incubation Centre
28.	Dr. Aman Dev Moudgil	Veterinary Parasitology	Convener, Institutional Innovation Council
29.	Dr. Deepika	Veterinary Pathology	Nodal Officer, CM Window, CPGRAMS
30.	Dr. Deepika	Veterinary Pathology	Nodal Officer, Samadhan Portal
31.	Dr. Deepika	Veterinary Pathology	President, Pranvayu Club
32.	Sh. K.K. Pilani	Dean office, College of Veterinary Sciences	Nodal Officer, HKRNL Cell



# PUBLICATIONS

15

## RESEARCH PAPERS

1. Amandeep, Bidhan DS, Sahu S, Yadav DC, Komal and Saini R (2023) Study on haemato-biochemical parameters of chicken broilers on supplementation of sodium sulphate and fish oil as dietary substitute to fish meal. *Haryana Vet.* **62(1)**: 94-96.
2. Amandeep, Grakh K, Vaishali, Kumar M, Gupta R, Mittal D, Kumar R and Jindal N (2023) Molecular epidemiology, antibiogram profile and risk factor analysis of pathogenic *Escherichia coli* associated with pre-weaning diarrhea in piglets from Haryana. *India. J. Infect. Public Health.* **16(11)**: 1793-1801.
3. Bagri P and Kumar V (2024) Determination of genoprotection against cyclophosphamide induced toxicity in bone marrow of Swiss albino mice by *Moringa oleifera* leaves and *Tinospora cordifolia* stem. *J. Toxicol Environ Health, Part A.* **87(16)**: 647-661. <https://doi.org/10.1080/15287394.2024.2356861>.
4. Bai R, Berwal RS, Jyotsana, Ritu, Komal, Shubhnish, Shabnam, Meetu and Choudhary R (2023) Dietary effects of herbal feed additive supplementation and pelleting of feed on carcass traits of broilers. *Pharma Innov J.* **12(11)**: 1471-1473.
5. Barhaiya RK and Kumar P (2024) Histology, histochemistry and ultrastructure of cornea of domestic pigs (*Sus scrofa domesticus*). *Anat Histol Embryol.* **53(4)**: 01-11. <https://doi.org/10.1111/ahe.13068>
6. Batra K, Kumar P, Sehrawat A, Agnihotri D and Maan S (2024) Detection and characterization of canine corona virus infection: an enteric approach. *Veterinarski Arhiv.* **94**:475-486.
7. Batra K, Sehrawat A, Kumar A, Singh M, Kaur R, Yadav DC, Singh N and Maan S (2024) Identification of circulatory microRNA based biomarkers for early pregnancy diagnosis in buffalo. *Front. Cell. Dev. Biol.* **12**: 1386241. doi: 10.3389/fcell.2024.1386241.
8. Bismarck M, Welder S, Baldassini A, Chiaratti MR, Pandey AK, Torrecilhas JA and et al. (2023) Skeletal muscle gene expression and meat quality of F1 Angus–Nellore young steers and bulls feedlot finished. *Livestock Sci.* **268**: 105151. <https://doi.org/10.1016/j.livsci.2022.105151>.
9. Budania S, Kadian SK, Kanagarajadurai K, Yadav V, Kumar A and Gupta AK (2024) Molecular and structural insights into buffalo interleukin-17A. *J. Interferon Cytokine Res.* **44(5)**: 221-231.10.1089/jir.2023.0228.
10. Chalana G, Sihag S, Kumar A and Magotra A (2023) Expression profiling of immune genes associated with black pepper (*Piper nigrum*) powder supplementation in the diets of broiler chickens. *Anim. Biotechnol.* **34(7)**. <https://doi.org/10.1080/10495398.2022.2088551>.
11. Charaya G, Ravina and Lather D (2023) Atypical theileriosis: cutaneous form in a cow and its therapeutic management. *Comp. Clin. Pathol.* **32**: 895-898. <https://doi.org/10.1007/s00580-023-03532-8>
12. Chaudhary G, Salaria A, Vekariya VY, Arora S and Singh AK (2024) Modeling and Optimizing Buttermilk Concentration and Coagulation Temperature for Paneer Production. *Indian J. Dairy Sci.* **76(1)**: 203-208.
13. Chaudhary V, Kajla P, Lather D, Chaudhary N, Dangi P, Singh P and Pandiselvam R (2024) Bacteriophages: a potential game changer in food processing industry. *Critical Rev. Biotechnol.* 1–25.
14. Chaudhary V, Sharma M, Jangir BL, Lather D and Nehra V (2023) Ameliorative effect of brahmi on haematological parameters in sub-acute cadmium induced toxicity in wistar rats. *Haryana Vet.* **62(2)**: 63-67.
15. Chetna, Gautam, Malik A and Kamaldeep (2024) Understanding the socio-personal landscape of veterinary students and scientists: Implications for





animal well-being. *Int. J. Res. Agron.* **7(6)**: 576-579.

16. Chetna, Gautam, Malik A, Bala A, Jaiswal UK and Kamaldeep (2024) Empathy towards animals: perspectives of veterinary students and faculty in Haryana. *Int. J. Adv. Biochem. Res.* **8(6)**: 768-772.

17. Chetna, Gautam, Malik A, Kumar K and Kamaldeep (2024) Personal attributes shaping attitudes towards animal welfare among veterinary students and faculty members. *Int. J. Agric. Ext. Social Dev.* **7(6)**: 242-248.

18. Chetna, Gautam, Malik A, Rachna, Kumar R, Ekta, Kamaldeep (2024) Exploring antecedent factors influencing empathy for animals among veterinary students & scientist: A comprehensive study. *Int. J. Agric. Ext. Social Dev.* **7(6)**: 235-241.

19. Chetna, Gautam, Malik A, Sarita, Kamaldeep, Jaiswal UK and Bala A (2024) Attitude of scientists and students towards animal welfare in Haryana. *Int. J. Adv. Biochem Res.* **8(6)**: 764-767.

20. Dalal A, Kakker NK, Chaudhary D, Kumar A, Maan NS and Maan S (2023) Co-infection of bluetongue virus serotypes 12 and 16 in sheep from Haryana, India. *Vet. Res. Forum.* **14(12)**: 635-641. DOI: 10.30466/vrf.2023.1990376.3796.

21. Dalal J and Singh G (2023) Dystocia due to hydrocephalus monster in a Murrah buffalo. *Indian J. Anim. Reprod.* **44(2)**: 99-100.

22. Dangi A, Kumar S, Sharma M, Chaudhary RN, Niwas R and Banger Y (2023) Comparative haematobiochemical evaluation of ultrasound guided and conventional tube cystostomy in male buffalo calves. *Haryana Vet.* **62(1)**: 34-37.

23. Dangi A, Kumar S, Sharma M, Kumar R, Chaudhary RN and Niwas R (2023) Comparative evaluation of skeletal muscle enzymes in male buffalo calves subjected to ultrasound guided and conventional tube cystostomy. *Haryana Vet.* **62(1)**: 31-33.

24. Deepanshu, Chaudhary RN, Kumar S, Tiwari DK and Dinesh (2024) Analgesic efficacy of buprenorphine hydrochloride and fentanyl Citrate for the postoperative pain management in buffaloes. *Haryana Vet.* **63(1)**: 49-52.

25. Deswal N and Gahlot PK (2024) Histomorphological and histochemical characterization of duodenum of Pig. *Haryana Vet.* **63(1)**: 32-35.

26. Devi H, Singh TP, Siwach R, and Chaudhary V (2024) Development of nutri-functional paneer whey-based kefir drink. *J. Food Sci. Technol.* <https://doi.org/10.1007/s13197-024-06023-y>.

27. Devi S, Kumar V, Bagri P and Lather D (2024) Evaluation of histopathological changes on acute exposure of profenofos in Swiss albino mice. *Pantnagar J. Res.* **22(1)**: 170-177.

28. Dhillod S, Bidhan DS, Sharma V, Singh M and Singh N (2024) Study on effect of supplementation of Moringa oleifera leaf meal (MOLM) on plasma glucose, blood urea nitrogen and cholesterol parameters in Murrah buffaloes. *Int. J. Livest Res.* **14(5)**: 7-12.

29. Dhiman NK, Manu M, Joshi VG and Malik YS (2024) Synthetic p72 peptide-based indirect enzyme-linked immunosorbent assay for diagnosis of African swine fever virus infection. *Indian J. Microbiol.* **27**: 1-2.

30. Dinesh, Chaudhary RN, Niwas R, Robin and Kumar S (2023) Successful non-surgical removal of cloth as an oesophageal foreign body from a buffalo calf. *Haryana Vet.* **62(1)**: 172-173.

31. Dutt R and Singh G (2023) Ultrasonographic diagnosis of reproductive disorders in Murrah buffaloes. *Buff Bull.* **42(3)**: 327-335.

32. Dutt R, Niwas R, Ravish S, Yadav U, Jinagal S, and Kumar M (2023) Post-partum uterine prolapsed and vaginal cystocele in a murrah buffalo. *Indian J. Anim. Rep.* **44(1)**: 66-68.

33. Dutt R, Rahul, Naveen, Jinagal S and Dalal J (2023) Dystocia due to muscular hypertrophy of fetal neck and shoulder in a Murrah buffalo: a case report. *Vet. Pract.* **24(2)**: 217-218.

34. Farooq S, Kumar A, Chaudhary S and Maan S (2024) Development of TaqMan probe- based RT-qPCR assays for detection of BoHV-1 latency in Bovine. *Indian J. Anim. Sci.* **94(3)**: 247-250.

35. Gill S, Madan J and Sindhu S (2024) Effect of citrus based plant extracts on vitro rumen fermentation parameters. *Haryana Vet.* **3**: 26-31.

36. Gonge DS, Gupta AK, Pandey A, Ratwan P, Yadav JS, Suman A, Keshri A and Govil K (2024) Estimation of





genetic gain for production and reproduction traits in Holstein Friesian crossbred: assessment and simulation. *Ann. For. Res.* **67(1)**: 397-409.

37. Grakh K, Mittal D, Prakash A, Kumar M, Kumar R and Jindal N (2023) Assessment and identification of risk factors associated with avian coccidiosis in Haryana, India. *Indian J. Vet. Sci. Biotech.* **19(2)**: 83-87.

38. Grakh K, Mittal D, Prakash A, Kumar R and Jindal N (2023) uspA gene-based phylogenetic analysis and antigenic epitope prediction for *Escherichia coli* strains of avian origin. *Front. Vet. Sci.* **10**: 1183048. 10.3389/fvets.2023.1183048.

39. Grakh K, Mittal D, Prakash A, Kumar R and Kumar M (2023) Standardization of pentaplex PCR for rapid diagnosis of avian pathogenic *Escherichia coli* infection. *Haryana Vet.* **62(1)**: 19-22.

40. Grakh K, Prakash A, Mittal D, Kumar R and Sheoran P (2023) Comparative study on biofilm formation among different *Escherichia coli* serotypes isolated from diarrheic piglets. *Haryana Vet.* **61(2)**: 83-87.

41. Gupta S, Sangwan N, Sangwan AK, Gupta S, Kumar A, Maan S, Kumar A and Kumar S (2024) Acaricide resistance status of deltamethrin and coumaphos in *Hyalommaanatolicum* ticks collected from different districts of Haryana. *Exp. Appl. Acarol.* **92(4)**: 809-833. <https://doi.org/10.1007/s10493-023-00894-0>.

42. Gupta S, Sangwan N, Sangwan AK, Gupta S, Kumar A, Maan S, Kumar A, Kumar S (2023) Understanding the resistance mechanisms of *Rhipicephalus microplus* ticks to synthetic pyrethroids and organophosphates in south-west regions of Haryana, North India. *Pest. Bio. Physiol.* **196**: 105634. <https://doi.org/10.1016/j.pestbp.2023.105634>.

43. Gupta S, Vohra S and Kumar R (2023) Study of mRNA expression levels in steady state *Trypanosoma evansi* for plausible selection of housekeeping and drug target genes. *J. Vet. Parasitol.* **37(1)**: 24-35. <https://doi.org/10.5958/0974-0813.2023.00005.0>.

44. Harini KR, Chandras, Sriranga KR, Gaur GK, Singh M, Singh G and *et al.* (2024) Farrowing kinetics vis-a-vis breed and parity in exotic and crossbred sows. *J. Exp. Zool/India.* **27(1)**: 643-646.

45. Hitesh, Kumar S, Singh G, Singh H, Pradeep, Rahul and Pandey AK (2024) Combined alternative medicine approach for the management of pyosalpinx in cattle. *Int. J. Adv. Biochem. Res.* **8(3)**: 687-690.

46. Indora B, Malik A, Raposo A, Singh S, Yadav S, Zandonadi RP and *et al.* (2023) Physico-chemical, sensory, and microbiological quality of raw chicken meat: an exploratory study in the Hisar city of Haryana, India. *Front. Nutr.* **10**: 1184005. doi: 10.3389/fnut.2023.1184005.

47. Jaiswal UK, Kumar R, Bishnoi VK, Bairdha A, Rewani SK and Kumar R (2024) Milking wisdom: Unraveling the knowledge tapestry of dairy farmers in storage and packaging of milk and value-added products. *Int. J. Agri. Exten. Social Develop.* **7(6)**: 235-241.

48. Jaiswal UK, Kumar R, Hashmi MI, Kumari K and Bishnoi VK (2024) Navigating challenges in dairy value addition: A holistic examination of constraints and strategic roadmaps for sustainable growth. *Int. J. Advan. Biochem. Res.* **8(1S)**: 890-894.

49. Jaiswal UK, Kumar R, Kumar R, Sarita and Bishnoi VK (2024) Unveiling strategies and opportunities perceived by farmers for value addition in milk practices. *Ind. Res. J. Exten. Educ.* **23(5)** Special issue.

50. Jangir TC, Hitesh, Pradeep, Rahul, Kumar S, Pandey AK and Luthra RA (2023) Effect of self-made intravaginal progesterone sponge on fertility in goat. *Indian J. Anim. Reprod.* **44(2)**: 55-63.

51. Jhandai P, Mittal D, Gupta R, Kumar M and Khurana R (2023) Therapeutics and prophylactic efficacy of novel lytic *Escherichia* phage vB\_EcoS\_PJ16 against multidrug resistant avian pathogenic *E. coli* using in vivo study. *Int Microbiol.* <https://doi.org/10.1007/s10123-023-00420-7>.

52. Kajal S, Narang G, Jangir BL, Kundu P, Lather D and Chhabra R (2023) Studies on immunopathological changes induced by commercial IBD live vaccines in poultry birds. *Scientific Rep.* **13**: 12379. <https://doi.org/10.1038/s41598-023-39017-5>.

53. Kalkal H and Vohra S (2023) Efficacy of benzimidazoles against gastrointestinal nematodes of goats from three agro-climatic zones of Haryana, India. *Haryana Vet.* **62(2)**: 26-29.





54. Kalkal H and Vohra S (2023) Efficacy of fenbendazole, closantel and ivermectin against gastrointestinal nematodes in unorganized sheep farms from dry sub-humid zone of Haryana. *Haryana Vet.* **62(2)**: 15-17.

55. Kalkal H, Sonu, Pooja, Bhardwaj V and Vohra S (2023) Gastrointestinal nematode population with multiple anthelmintic resistances in unorganized sheep farms from the semi-arid zone of Haryana. *J Anim Res.* **13(3)**: 457-461.

56. Kamothi DJ, Kant V, Jangir BL, Ahuja M, Joshi VG and Kumar V (2024) Thermoresponsive gel containing bilirubin nanoparticles exerts anti-inflammatory effects by inhibiting neutrophil infiltration and augmenting interleukin-10 levels in carrageenan-induced rat paw edema. *Indian J. Pharma.* **56(3)**: 191-197.

57. Kamothi DJ, Kant V, Yadav SD, and Kumar V (2023) Antioxidant potential of bilirubin nanoparticles: *In vitro* time and concentration dependent study. *Explor. Anim. Med. Res.* **13(2)**. DOI:10.52635/eamr/13.2. 220-230.

58. Kandpal D, Sharma R, Saini P, Nehra V, Chahal A, Chaudhary V, Sameer, Lather D and Nehra V (2023) Strangulated and impacted colic in horse: A case report. *Indian J. Vet. Pathol.* **47(3)**: 271-273. 10.5958/0973-970X.2023.00049.4.

59. Kanwar A, Virmani M, Lal S, Chaudhary K, Kumar S, Magotra A, Pandey AK (2023) Silver nanoparticle as an alternate to antibiotics in cattle semen during cryopreservation. *Anim Reprod.* **20(3)**. e20220030. <https://doi.org/10.1590/1984-3143-AR2022-0030>.

60. Kaur R, Kumar P, Jindal N, Minhas SK, Panghal R, Sheoran D, Kakker NK, Prakash A and Joshi V (2023). Porcine astrovirus detection and characterization in healthy and diarrheic pigs from Haryana, India. *Indian J. Anim. Res.* **57(10)**: 1351-1357.

61. Kaur R, Maan S, Batra K, Singh N, Chahal N, and Kumar A (2024) Rapid detection of porcine sapelovirus by reverse transcription recombinase polymerase amplification assay. *Mol. Biol. Rep.* **51(1)**: 178.

62. Kaur R, Magotra A, Kumar S, Gera S, Karan R, Kamaldeep, Garg A and Pushpa (2024) Genetic Profiling of K232A mutation of DGAT1 gene in Murrah Buffalo. *Buff. Bull.* **43(2)**: 135-141.

63. Kaushik D, Saharan S, Tiwari DK, Arora N and Kumar G (2024). Surgical repair of femoral fractures in dogs. *Haryana Vet.* **63(SI)**: 107-109.

64. Khanna S, Potliya S, Ganguly A, Singh H, Maharana BR, Singh D and Gowane GR (2024) An assessment of indian livestock owners' selective management practices for risk amelioration of obstructive urolithiasis in water buffalo male calves. *Asian J. Dairy Food Res.* **43(2)**: 373-380.

65. Khanna S, Singh D, Bangar Y and Shunthwal J (2024) First questionnaire-based survey on the uptake and use of FMD-HS combined oil adjuvant vaccine in India. *Indian J. Anim. Res.* **58(7)**: 1215-1220.

66. Kirrolia AS, Bishnoi NR, Kumar A, Brindhadevi K (2024) Response surface methodology as a statistical tool for optimization and FAME profile by GC-MS for assessing microalgae *Scenedesmus quadricauda* as a potential biodiesel feedstock. *J. Taiwan Inst. Chem. Engs.* ISSN 1876-1070, <https://doi.org/10.1016/j.jtice.2024.105415>.

67. Komal, Bidhan DS, Amandeep, Jyotsana and Sihag S (2024) Effect of Faba bean (*Vicia faba*) as a cheap protein source on body weight of Murrah buffalo. *Int. J. Adv. Biochem. Res.* **8(6)**: 303-304.

68. Kumar A, Gupta G and Jain SK (2023) Imidacloprid induced oxidative stress and histopathological alterations in rat liver and its amelioration by resveratrol. *J. Vet. Pharmacol. Toxicol.* **22(2)**: 56-60.

69. Kumar A, Gupta G and Jain SK (2023) Protective effect of resveratrol in imidacloprid induced sub-acute neurotoxicity in male rats. *J. Vet. Pharmacol. Toxicol.* **22(2)**: 50-55.

70. Kumar A, Kumar S, Chaudhary RN, Niwas R and Sahil (2023) Comparative evaluation of propofol and etomidate as induction agent in buffaloes. *Haryana Vet.* **62(2)**: 60-62.

71. Kumar A, Saharan S and Priyanka (2024) Successful surgical management of massive coccygeal varicosity in a buffalo. *Vet. Pract.* **25(1)**: 38-39.

72. Kumar A, Saharan S, Tiwari DK, Sharma M and





Gahlot PK (2024) Use of Walpole's solution and ultrasound-guided tube cystostomy for the treatment of obstructive urolithiasis in male buffalo calves. *Vet. Pract.* **25(1)**.

73. Kumar A, Singh G, Andonissamy J, Kumar P, Venkateshappa A, Bala R, Verma N, Patil CS and Sharma RK (2024) Inter-relationship of peripheral hormones (IGF-1, testosterone and growth hormone) with reproductive traits in male buffalo. *Buff. Bull.* **42(4)**: 467-477.

74. Kumar A, Virmani M, Kumar R, Kumar S, Sarthak, Pandey AK, Kumar S and Patil CS (2023) Inclusion of 1, 3-dimethylxanthine improved quality parameters of bull semen. *Anim Biol.* **25(4)**: 11-16. <https://doi.org/10.15407/animbiol25.04.011>.

75. Kumar D, Mehta JS, Jerome A, Kumar P, Kumar D, Shivani B, Patil CS, Bala R, Verma N, Nain S, Sharma R and Singh P (2023) Genetic analysis for semen quality traits in buffalo bulls. *Trop Anim Health Prod.* **55**: 1-6.

76. Kumar D, Mehta, JS, Jerome A, Kumar P, Bhardwaj S, Patil CS, Bala R, Verma N, Virmani M, Sharma RK and Singh P (2024) Cryopreservation alters buffalo sperm kinematics and mitochondrial parameters, acrosome and intra-cellular calcium status. *Cryoletters.* **45(4)**: 257-268.

77. Kumar G, Arora N, Tiwari DK and Sharma S (2024) Emergency surgical management of thoracic and limb injuries in a hare (*Lepus nigricollis*). *J. Sci. Res. Rep.* **30(3)**: 139-143.

78. Kumar M, Kumar T, Jangir BL, Singh M, Arora D, Bangar Y, Conlan A, Vordermeier M, Bakker D, Byregowda SM, Srinivasan S, Kapur V and Jindal N (2024) Comparative analysis of tuberculin and defined antigen skin tests for detection of bovine tuberculosis in buffaloes (*Bubalus bubalis*) in Haryana state, India. *BMC Vet. Res.* **20**: 1-10.

79. Kumar MR, Patil CS, Yadav AS, Bangar YC and Chitra A (2023) Estimation of the seminal parameters of rooster and its association with fertility traits in synthetic dam line. *Trop. Anim. Health Prod.* **56(1)**: 17.

80. Kumar N, Gupta R, Kumar A and Khurana R (2024) Survey of broiler farms in Haryana to assess their performance efficiency and factors affecting it. *Haryana Vet.* **63(S1)**: 15-18.

81. Kumar NS, Arora N, Tiwari DK, Saharan S, Sharma S, Poonia A and Kumar S (2024) Evaluation of  $\beta$ -tricalcium phosphate ( $\beta$ -TCP) and platelet rich plasma (PRP) combination for fracture healing in dogs stabilized with intramedullary pinning. *Indian J. Anim. Res.* **B-5203**: 1-5.

82. Kumar P, Gautam, Jaiswal UK, Anika, Kumar R and Rachna (2023) Constraints faced by the veterinarians and dairy farmers regarding livestock development schemes (LDS). *Haryana Vet.* **62(2)**: 50-54.

83. Kumar P, Pandey AK, Kumar S, Pradeep, Saini G, Hitesh and Singh G (2023) Impact of Doublesynch and Ovsynch protocols, preovulatory follicle, estradiol and luteal profiles on fertility in cyclic murrah buffaloes during breeding and compromised -breeding season. *Indian J. Anim. Reprod.* **43(1)**: 50–56. <https://doi.org/10.48165/ijar.2022.43.1.9>.

84. Kumar P, Singh A, Gahlot PK and Parkash T (2023) Histoenzyme localization of phosphatases and oxidoreducatse in the tonsils of oro-pharyngeal region of buffalos (*Bubalis bubalis*). *J. Dairy Vet. Sci.* **15(5)**: 001-007.

85. Kumar R, Bera BC, Anand T, Pavulraj S, Kurian Mathew M, Gupta R, Tripathi BN and Virmani N (2024) Evaluation of immunogenicity and protective efficacy of bacteriophage conjugated haemagglutinin based subunit vaccine against equine influenza virus in a murine model. *Vet. Res. Commun.* **48(3)**: 1707-1726. doi: 10.1007/s11259-024-10356-6.

86. Kumar R, Gautam, Rani E and Malik A (2024) Cradle-to-factory gate environmental impact of the dairy sector in Haryana, India. *Int J Environ Sci Technol.* <https://doi.org/10.1007/s13762-024-05747-w>.

87. Kumar S and Saharan V (2023) Comparison of feeding value of wheat straw and rice straw of non-basmati cultivar in murrah buffalo calves. *Forage Res.* **49(3)**: 364-368.

88. Kumar S, Chaudhary RN, Niwas R, Sharma M, Tiwari DK, Dinesh and Magotra A (2023) Evaluation of atropine-midazolam-butorphanol-propofol-isoflurane anaesthesia in buffaloes undergoing diaphragmatic herniorraphy. *Haryana Vet.* **62(S1)**: 48-51.





89. Kumar S, Saharan V, Sihag ZS and Sihag S (2024) Dietary Supplementation of Shatavari (Asparagus Racemosus) During Transition Period Influences Blood Metabolites, Milk Production and its Quality in Cattle. *Indian J. Anim. Nutr.* **41**(1): 95-104.

90. Kumar S, Sihag ZS, Saharan V and Sihag S (2023) Effect of feeding treated rice straw on nutrient utilization, growth performance and blood parameters in buffalo calves. *Haryana Vet.* **62**(1): 73-77.

91. Kumar S, Yadav AS, Magotra A, Bangar YC, Garg AR and Kumar N (2024) Polymorphism of growth hormone (GH) gene and its association with performance and body conformation of Harnali sheep. *Trop Anim. Health Prod.* **56**(3): 116. <https://doi.org/10.1007/s11250-024-03968-2>.

92. Kumar S, Yadav AS, Magotra A, Garg AR and Kumar N (2023) Evaluation of CAST/Msp1 gene polymorphism in Harnali sheep. *Rum Sci.* **12**(1): 99-102.

93. Kumar S, Yadav S, Rani R and Pathera A (2024) Effects of plum powder and apple pomace powder addition on the physico-chemical, sensory, and textural properties of buffalo meat emulsion. *Nutr. Food Sci.* **54**(2): 421-432. <https://doi.org/10.1108/NFS-09-2023-0223>.

94. Kumar T, Pooja, Gupta S and Kumar A (2024) Asteroid hyalosis in dog: A case report. *Acta Sci. Vet. Sci.* **6**(7): 18-20.

95. Kumar T, Rajora VS, Arora N, Mittal D and Prasad A (2023) In vivo therapeutic evaluation of phage cocktail and probiotic in reducing Salmonella infection in Broilers. *Indian J. Ani. Sci.* **93**(12): 1150-1154.

96. Kumar V, Dahiya S, Budania S, Gupta AK, Sangwan P, Lather A, Kumar P, Kakker NK and Singh A (2023) Characterization of Foot-and-Mouth Disease Virus Serotype O-Specific Single Domain Antibody Expressed in the pET Expression System. *Indian J. Microbiol.* **63**(3): 337-343. <https://doi.org/10.1007/s12088-023-01095-4>.

97. Kumar S, Jangir BL and Rao R (2024) Novel topical clobetasol propionate nanosponges loaded hydrogel for psoriasis: irritation evaluation, mechanistic insights, *in vivo* appraisal and biochemical investigations. *Bio Nano Science.* doi.org/10.1007/s12668-024-01432-x.

98. Kumari P, Kant V and Ahuja M (2024) Formulation, characterization, *in vitro* and *in vivo* evaluation of thermoresponsive lawsone-based Pluronic F-127 nanogels for wound healing. *J. Drug Del Sci. Tech.* **93**. <https://doi.org/10.1016/j.jddst.2024.105451>.

99. Kumari P, Kant V, Chandratre GA and Ahuja M (2024) Formulation and Evaluation of Pluronic F-127 Thermoresponsive Nanogels Containing Juglone for *In vivo* Wound Healing Potential. *Bio Nano Sci.* **1**: 23. <https://doi.org/10.1007/s12668-024-01429-6>.

100. Kumari S, Kumar S, Pandey AK, Vaishali and Malik A (2024) Incidence of follicular cysts in buffaloes. *Int. J. Advanced Biochem Res.* **8**(7): 47-49.

101. Kumari S, Pandey AK, Kumar S, Vaishali, Bagri P, Magotra A and Kumar S (2024) Seasonal comparative analysis of follicular interleukin concentration and expression of IL1RII, IL4 and IL1RA in cystic follicles versus normal preovulatory follicles in buffalo. *Indian J. Anim. Res.* B-5373[1-7]. DOI:10.18805/IJAR.B-5373.

102. Kumari A, Singh M, Sharma R, Kumar T, Jindal N, Maan S and Joshi VG (2023) Apoptin NLS2 homodimerization strategy for improved antibacterial activity and bio stability. *Amino Acids.* **55**: 1405-1416.

103. Lather D, Saini P, Sharma R and Nehra, V (2024) Metastatic cholangiocellular carcinoma in turkey: A rare case report. *Int. J. Adv. Biochem. Res.* **8**(7): 80-82. <https://doi.org/10.33545/26174693.2024.v8.i7Sb.1445>.

104. Mahajan D, Kumar T, Rath PK, Sahoo AK, Mishra BP, Kumar S, Nayak NR and Jena MK (2024) Dendritic Cells and the Establishment of Fetomaternal Tolerance for Successful Human Pregnancy. *Arch Immunol. Ther. Exp. (Warsz).* **23**: 72(1). doi: 10.2478/aitc-2024-0010. PMID: 38782369.

105. Maharana BR, Ganguly A, Potliya S, Kumar B, Singh H, Dash A and Khanna S (2024) Molecular detection and characterization of prevailing *Theileria equi* genotype in equine from northern India. *Res. Vet. Sci.* **173**: 10527. <https://doi.org/10.1016/j.rvsc.2024.105277>.

106. Malik A, Gautam and Kamaldeep (2024) Insights





into the socio- economic dynamics of dairy farmers in Haryana. *Int. J. Res. Agron.* **7(6)**: 673-678.

107. Malik D, Magotra A, Bangar YC, Pushpa, Chaudhari M, Chaudhary P and Garg AR (2024) Evaluation of  $\alpha$ -Lactoglobulin gene polymorphism with milk composition and udder conformation traits in indigenous sheep. *Small Rumin. Res.* **233**: PMID: 107222.

108. Mandeep, Chandratre, GA, Lather D, Chhabra R and Gupta R (2023) Pathomorphological investigation on membranous tracheitis in an adult buffalo. *Indian J. Vet. Sci. Biotech.* **19(2)**: 107-110.

109. Manikant, Saharan S, Kumar A, Poonia A, Tiwari DK and Sharma M (2023) Comparative evaluation of surgical management of long bone fracture with interlocking nailing alone and along with  $\alpha$ -tricalcium phosphate in dogs. *Haryana Vet.* **62(2)**: 35-40.

110. Manoj J, Chhabra R, Singh M and Singh MK (2024) A temporal study on incidence of bovine mastitis in Haryana, India. *Microbiol Res. J. Int.* **34(4)**: 1-12.10.9734/mrji/2024/v34i41437.

111. Manoj J, Kamboj S, Chhabra R and Singh M (2024) Occurrence and characterization of multidrug-resistant extended spectrum  $\beta$ -lactamase producing *Escherichia coli* from bovine mastitis of Haryana. *Indian J. Anim. Sci.* **94(6)**: 477-481. <https://doi.org/10.56093/ijans.v94i6.1504866>.

112. Meetu, Tewatia BS, Jyotsana, Panwar VS, Singh A and Ritu (2023) Effect of supplementation of cotton seed oil and its bypass fat on nutrient intake, utilization and growth in goat kids. *Indian J. Small Rum.* **29(2)**: 251-256.

113. Mehra A and Kumar P (2023) Age related histological and histochemical studies on the proventriculus of broiler chickens. *Clinic Res. Anim. Sci.* **3(1)**. 000552. 2023. DOI: 10.31031/CRAS.2023.03.000552.

114. Moudgil AD, Nehra AK and Moudgil P (2024) Understanding the role of pigs in the transmission of zoonotic *Echinococcus* ortleppi in Haryana, India. *Parasitol Res.* **123**: 172. <https://doi.org/10.1007/s00436-024-08192-3>.

115. Moudgil AD, Nehra AK, Langyan N, Kumar V and Vohra S (2024) Population structure and haplotype network analyses of *Hyalommaanatolicum* based on the large subunit ribosomal RNA (16S rRNA) gene. *Parasitol Res.* **123**: 259-268. <https://doi.org/10.1007/s00436-024-08279-x>.

116. Moudgil AD, Nehra AK, Vohra S, Kumari A and Moudgil P (2023) Cladistics of *Echinococcus granulosus* sensu stricto genotypes infecting the slaughtered pigs. *Acta Parasitol.* **68(4)**: 754-761. <https://doi.org/10.1007/s11686-023-00709-7>.

117. Moudgil P, Pandita S, Kumar R, Khasa V, Dash SS, Bangar YC and Jindal N (2024) Seroprevalence and risk factors associated with *Toxoplasma gondii* in pigs in Haryana, India. *Zoo Public Health.* **71(2)**: 136-143.

118. Nangru A, Maharana BR, Vohra S, Kumar B, Ganguly A, Sahu S, Singh H, Ruhil S and Khichar V (2023) Identification, molecular characterization and risk factors of Theileria infection among sheep: a first comprehensive report from North India. *Anim. Biotechnol.* **34(8)**: 3658-3670.

119. Nehra AK, Kumari A, Moudgil AD and Vohra S (2024) Revisiting the genotypes of *Theileria equi* based on the V4 hypervariable region of the 18S rRNA gene. *Front Vet. Sci.* **11**: 1303090. <https://doi.org/10.3389/fvets.2024.1303090>.

120. Nehra AK, Moudgil AD, Kumari A, Kumar V and Vohra S (2024) Population genetic characterization of *Theileria annulata* based on the cytochrome b gene, with genetic insights into buparvaquone susceptibility in Haryana (India). *Acta Trop.* **107103**. <https://doi.org/10.1016/j.actatropica.2023.107103>.

121. Nehra N, Lather D, Chahal A, Nehra V and Sarthak (2024) Effect of eugenol (Clove oil) supplementation on haemato-biochemical and immunological parameters in broiler chicks. *Haryana Vet.* **63(SI)**: 113-117.

122. Niwas R, Jinagal S, Amandeep, Anil and Dutt R (2023) Uterine rupture associated with uterine torsion in a pregnant bitch. *Indian J. Anim. Reprod.* **44(2)**: 93-95.

123. Niwas R, Kumar S and Priyanka (2023) Femur fracture repair using internal fixation technique in blue bull calf (*Boselaphustragocamelus*). *Int. J. Livestock Res.* **13**: 8-9.

124. Panghal R, Dahiya S, Gupta AK, Sharma V, Bangar YC and Kakker NK (2023) Persistence of maternal





antibodies in calves born of combined foot-and-mouth disease + haemorrhagic septicaemia vaccinated buffaloes at organized dairy farm. *Indian J. Anim. Sci.* **93(8)**: 759-763. DOI: <https://doi.org/10.56093/ijans.v93i8.127857>.

125. Poonia A, Alpa, Saharan S, Punia S and Sharma M (2024) Hepatic encephalopathy in Marwari mare. *Int. J. Adv. Biochem. Res.* **8(6S)**: 625-626. DOI: [10.33545/26174693.2024.v8.i6Sh.1417](https://doi.org/10.33545/26174693.2024.v8.i6Sh.1417).

126. Poonia A, Alpa, Saharan S, Punia S and Sharma M (2024) Surgical management of a large cystolith in a spitz. *Int. J. Adv. Biochem. Res.* **8(6)**: 750-752.

127. Poonia A, Saharan S, Kumar A, Sachin, Tiwari DK and Arora N. (2023). Surgical management of cherry eye in dogs: Comparison of two techniques. *Haryana Vet.* **62(SI)**: 95-96.

128. Prakash A, Bhanot V, Yadav R and Kumar P (2024) Retrospective study on occurrence of bovine gastrointestinal parasitic infections in different regions of Haryana. *Indian J. Ani. Sci.* **94(4)**: 315-320. <https://doi.org/10.56093/ijans.v94i4.135621>.

129. Preetam, Tiwari V and Jangir BL (2024) Influence of pre-treatment of *Withaniasomenifera* root extract and cow urine on hemato-biochemical parameters in acetaminophen induced toxicity in swiss albino male mice. *Indian J. Anim. Res.* <https://doi.org/10.18805/IJAR.B-5162>.

130. Punia M, Maan S, Batra K, Kumar A, Maan NS and Gahlawat SK (2023) Development of a multiplexed Luminex assay for simultaneous detection of entericviruses in cattle. *Vet. Res. Forum.* **15(1)**: doi: [10.30466/vrf.2023.2005728.3925](https://doi.org/10.30466/vrf.2023.2005728.3925).

131. Pushpa, Magotra A, Bangar YC, Patil CS, Kamaldeep, Sindhu V, Malik D, Chaudhary P, Garg AR and Kumar S (2023) Association of CXCR1 gene polymorphism with clinical mastitis, reproductive disorders and performance traits in Hardhenu (*Bos taurus* × *Bos indicus*) cattle. *Reprod. Domest. Anim.* **58(9)**: 1234-1243.

132. Pushpa, Magotra A, Kamaldeep, Sindhu V and Chaudhary P (2023) Impact of Temporal variations and risk factors associated with udder inflammation in Hardhenu cattle (*Bos taurus* × *Bos indicus*). *Reprod. Domest. Anim.* **58(11)**: 1612-1621.

133. Pushpa, Magotra A, Patil CS, Bangar YC, Sindhu V, Chaudhary P and Garg AR (2023) Temporal variation and risk factors associated with reproductive disorders in Hardhenu (*Bos taurus* × *Bos indicus*) dairy cattle. *Reprod. Domest. Anim.* **58(10)**: 1404-1412.

134. Rajneesh, Chandras, Tarafdar A, Gaur GK, Singh M, Chandra D, Raj N, Verma MR and Kumar N (2023) Utilization of different carbonaceous materials to balance c:n ratio of poultry waste. *J. Exp. Zool. India.* **26(2)**: 2559-2562.

135. Ranga LC, Chandolia RK, Singh L and Dutt R (2023) Correlation of age with body weight and testicular biometry in developing buffalo males of Murrah breed. *Buff. Bull.* **42(4)**: 455-466.

136. Ranga LC, Chandolia RK, Singh L and Dutt R (2023) Ultrasonographic characteristics of prostate and seminal vesicle glands in developing Murrah buffalo bulls. *Buff. Bull.* **42(3)**: 313-325.

137. Rani M, Dabur RS, Bishnoi S and Jairath G (2023) Influence of storage on physico chemical physiognomies of fermented whey cereal (pearl millet and moth bean) beverage. *J. Food Sci. Technol.* <https://doi.org/10.1007/s13197-023-05825-w>.

138. Rani M, Saharan S, Kumar A, Tiwari DK and Arora N (2024) Surgical management of ileocolic intussusception in a German shepherd pup: A case report. *International J. Vet. Sci. Anim. Hus.* **9(1)**: 1136-1138.

139. Rani R, Sethi K, Gupta S, Virmani N, Kumar S and Kumar R (2023) Intracellular ROS production and apoptotic effect of quinoline and isoquinoline alkaloids on the growth of *Trypanosoma evansi*. *Acta Tropica.* **245**: 106980. <https://doi.org/10.1016/j.actatropica.2023.106980>.

140. Rani R, Yadav S, Thakur N, Kumar S, Han H, Alturki HA, Ahmad MF and Raposo A (2024) Effect of incorporation of pumpkin seed powder and chia seed powder on storage stability of fiber enriched chicken meat nuggets. *LWT-Food Sci. Technol.* **191**: 115574.

141. Rathi P, Dalal DS, Patil CS and Sharma S (2024) Estimation of genetic parameters of egg quality traits in Aseel and Kadaknath chicken. *Int. J. Vet. Sci. Anim. Husb.* **9(3)**: 242-246.

142. Rathi P, Dalal DS, Patil CS and Sharma S (2024)





Principal component analysis of morpho-biometric traits in Indigenous Aseel chicken. *Int. J. Res. Agron.* **7(6)**: 540-545. 5.2.

143. Robin, Chaudhary RN, Jaiswal SK, Niwas R and Priyanka (2023) Evaluation of Mg-3Zn biodegradable intramedullary pins in dogs with long bone fractures. *Indian J. Vet. Surg.* **44(2)**: 83-87.

144. Rustagi N, Kakker NK, Sheoran S, Santosh PC, Dahiya S, and Gupta AK (2023) Kinetics of humoral response to *Pasteurella multocida* in buffaloes against combined foot-and-mouth+ haemorrhagic septicaemia vaccine. *Indian J. Anim. Sci.* **93(9)**: 853-857. <https://doi.org/10.56093/ijans.v93i9.114913>.

145. Sachin, Kumar N, Arora N, Tiwari DK, Saharan S, Sharma S, Poonia A and Kumar S (2024) Evaluation of  $\alpha$ -tricalcium phosphate ( $\alpha$ -TCP) and platelet rich plasma (PRP) combination for fracture healing in dogs stabilized with intramedullary pinning. *Indian J. Anim. Res.* DOI: 10.18805/IJAR.B-5203.

146. Sachin, Saharan S, Poonia A, Tiwari DK, Kumar S, Yadav D, Kumar A and Manikant (2023) Evaluation of doxapram for faster recovery behaviour and haemato-biochemical parameters following ketofolanaesthesia in dogs. *Haryana Vet.* **62(2)**: 20-23.

147. Saharan S, Dinesh, Poonia A, Niwas R, Kumar S, Priyanka and Kumar A (2023) Surgical retrieval of gastrointestinal foreign bodies in dogs- A report of five cases. *Haryana Vet.* **62(SI)**: 108-109.

148. Saharan S, Poonia A, Kumar A, Anil and Tiwari DK (2023) Non-surgical retrieval of metallic wire from the cranial oesophageal region in a bullock. *Haryana Vet.* **62(SI)**: 133-134.

149. Saharan S, Poonia A, Kumar A, Chandratre GA, Dinesh and Tiwari DK (2024) Diagnosis and surgical management of transitional cell carcinoma in a dog. *Int. J. Advan. Biochem. Res.* **8(6)**: 627-629.

150. Saharan S, Poonia A, Kumar A, Tiwari DK, Jangir BL and Sharma M (2024) A Rare case report of intrabdominal fibrosarcoma in a German Shepherd dog. *J. Sci. Res. Rep.* **30(7)**: 591-96.

151. Saharan V, Lamba P, Sihag S, Tewatia BS and Kumar S (2024) Proximate nutrient composition (on dry matter basis) of feedstuffs used by farmers of raya-pearl millet growing zone of Haryana. *Int. J. Vet. Sci. Anim. Husb.* **9(1)**: 330-332.

152. Saini D, Tiwari DK, Kumar A, Arora N, Kumar G, Sharma S and Kumar S (2023) Surgical management of obstructive urolithiasis using silver coated foley's catheter and latex coated foley's catheter in male buffalo calves. *Haryana Vet.* **62(1)**: 81-85.

153. Saini G, Kumar S, Pandey AK, Yadav V and Sharma S (2023) Intensity of estrus expression- valuable obvious determinant of fertility in *Bos indicus* cows. *Anim. Biotechnol.* **34(8)**: 3867-3876.

154. Saini G, Singh G, Pandey AK, Kumar S and Ravish S (2023) Comparative efficacy of D-Cloprostenol and DL-Cloprostenol on cervical dilatation after detorsion in buffaloes. *Indian J. Anim. Reprod.* **42(2)**: 48-50.

155. Saini P, Jangir BL, Narang G, Sharma R and Priyanka (2024) Pathomorphological and Immuno-histochemical Study of Fibrosarcoma in an Adult Dog: A Case Report. *Archiv. Curr. Res. Int.* **24(5)**: 792-798.

156. Samtiya M, Badgujar PC, Chandratre GA, Aluko RE, Kumar A, Bhushan B and Dhewa T (2024) Effect of selective fermentation on nutritional parameters and techno-functional characteristics of fermented millet-based probiotic dairy product. *Food Chem.* **22**: 101483 <https://doi.org/10.1016/j.foodch.2024.101483>.

157. Samtiya M, Chandratre GA, Dhewa T, Badgujar PC, Sirohi R, Kumar A and Kumar A (2023) A comparative study on comprehensive nutritional profiling of indigenous non-bio-fortified and bio-fortified varieties and bio-fortified hybrids of pearl millets. *J. Food Sci. Tech.* **60(3)**: 1065-1076. DOI:10.1007/s13197-022-05452-x.

158. Sangwan A, Choudhary G and Yadav R (2024) Nail avulsion in a camel-a case report. *J. Camel Pract. Res.* **31(1)**: 87-88.

159. Sarowa A, Chhikara SK, Sahu S, Yadav DC, Amandeep, Ghotar R and Komal (2023) Effect of fenugreek (methi) supplementation on milk production, milk composition and haemato-biochemical parameters in murrah buffaloes. *Haryana Vet.* **62(1)**: 1-4.

160. Sarthak, Madan J and Sindhu S (2024) Effect of citrus based plant extracts on *in vitro* rumen





fermentation parameters. *Haryana Vet.* **3**: 26-31.

161. Sehgal T, Dahiya SP, Dalal DS, Patil CS, Ratwan P and Bangar YC (2024) Estimation of genetic parameters as well as trends for growth traits in Harnali sheep. *Indian J. Anim. Sci.* **94(5)**: 435-441.

162. Shambhavi, Ranjan K, Shukla MK, Kumar A, Verma AK, Tripathi A, Kapoor N, Kumar S (2023) MX2 gene mRNA expression as potential biomarker for early pregnancy diagnosis in cattle. *Indian J. Anim. Sci.* **93(10)**: 958-962, October 2023/Articlehttps://doi.org/10.56093/ijans.v93i10.138127.

163. Sharma A, Kumar A, Singh N and Maan S (2024) Novel Isothermal Reverse Transcription Polymerase Spiral Reaction (RT PSR) Assay for the Detection of Newcastle Disease Virus in Avian Species. *Indian J. Microbiol.* <https://doi.org/10.1007/s12088-024-01268-9>.

164. Sharma M, Mathesh K, Dandapat P, Mariappan AK, Kumar R, Kumari S, Kapur V, Maan S, Jindal N, Bansal N, Kadiwar R, Kumar A, Gupta N, Pawde AM and Sharma A (2023) Emergence of *Mycobacterium avium* subspecies paratuberculosis (MAP) seropositive diarrhoeic bovines. *Emerg. Infect. Dis.* **29(3)**: 661-663.

165. Sharma M, Sangwan SS, Malik A, Kumar K, Kamaldeep and Kumari S (2024) Empowering dairy farmers: Impact of scientific training on health care and marketing practices. *Int. J. Adv. Biochem. Res.* **8(7)**: 43-46.

166. Sharma R, Saini P, Kandpal D and Lather D (2023) A case report on pathomorphological study of intraabdominal lipoma in an adult bull. *Pharma Innov. J.* **12(11)**: 1703-1705.

167. Sharma R, Saini P, Kandpal D, Sharma D, Jangir BL, Lather D and Narang G (2024) Pathological study of Oestrusovis infection in sheep and goat. *Haryana Vet.* **63(SI)**: 105-106.

168. Sharma S, Dhaka SS and Patil CS (2023) Estimation of estimated breeding values for production and fertility performance traits in Murrah buffaloes. *Haryana Vet.* **62(2)**: 113-117.

169. Sharma S, Dhaka SS and Patil CS (2023) Genetic parameters of fertility traits in Murrah buffaloes. *Indian J. Dairy Sci.* **76(5)**: 487-492.

170. Sharma S, Dhaka SS and Patil CS (2023) Sire conception rate in Murrah breeding bulls. *Haryana Vet.* **62(SI-2)**: 12-14.

171. Sharma S, Dhaka SS and Patil CS (2024) Estimation of additive and maternal covariance of production traits in Murrah buffalo. *J. Anim. Breed Genet.* **141(4)**: 415-424.

172. Sharma S, Dhaka SS, Patil CS and Rathi P (2024) Estimation of direct and maternal covariance along with genetic and phenotypic trends of reproduction traits in Murrah buffalo. *Reprod. Domest. Anim.* **59(1)**: e14526.

173. Sharma S, Dhaka SS, Patil CS, Yadav AS and Sahu S (2023) Genetic parameters of production performance traits in Murrah buffaloes. *Haryana Vet.* **62(1)**: 54-59.

174. Sharma S, Sharma K, Kumar R, Dayal D, Dhanda S, Kumar N, Chaubey KK, Singh SV, Banger S and Sharma V (2024) Evaluation of Immune Exhaustion and co-inhibitory receptor expression in *Mycobacterium avium* subspecies paratuberculosis (MAP) seropositive diarrhoeic bovines. *Pathogens.* **13**: 473.

175. Sheoran S, Dey A and Sindhu S (2023) Reduction of methane and nitrogen emission and improvement of feed efficiency, rumen fermentation, and milk production through strategic supplementation of eucalyptus (*Eucalyptus citriodora*) leaf meal in the diet of lactating buffalo (*Bubalus bubalis*). *Environ. Sci. Pollut. Res.* <https://doi.org/10.1007/s11356-023-31089-0>.

176. Shrinet G, Chhabra R, Sharma A, Batra K, Talukdar SJ and Maan S (2023) High throughput Luminex beads based multiplex assay for identification of six major bacterial pathogens of mastitis in dairy animals. *Front Cell Infect Microbiol.* **13**: 1125562.

177. Shubhnish, Panwar VS, Tewatia BS and Jyotsana (2024) Inorganic, Organic and Nano Zinc Supplemented Diets in Broilers Carcass Traits, Mineral Retention, Blood Biochemistry and Economics of Broiler Chicken Fed Inorganic, Organic and Nano Zinc Supplemented Diets. *Indian J. Anim. Nutr.* **41(1)**: 169-174.

178. Shubhnish, Sihag S, Kumar S, Meetu, Ritu and Shabnam (2023) Effect of betaine hydrochloride supplemented diets on growth and nutrient





metabolizability of broilers. *Pharma Innov. J.* **12(12)**: 836-839.

179. Shunthwal J, Sihag ZS, Magotra A and Sihag S (2023) Investigating the impact of linseed supplementation, rich in omega-3 fatty acids, on the expression of immune genes in Beetal Goats. *Anim Biotechnol.* **34(8)**: 4015-4020.

180. Singh A, Arora N, Tiwari DK, Poonia A, Kumar G, Kumar R and Jangir BL (2023) Comparative evaluation of pinhole and section ligation release castration techniques in male dogs. *Indian J. Anim. Sci.* **93(11)**: 1057-1062. <https://doi.org/10.56093/ijans.v93i11.127151>.

181. Singh A, Kaur S and Singh O (2023) Histomorphogenesis of sublingual salivary gland of Indian sheep. *J. Histotechnol.* <https://doi.org/10.1080/01478885.2023.2266799>.

182. Singh A, Kaur S and Singh O (2024) Developmental events in the mandibular salivary gland of Indian sheep (*Ovis aries*): Morphological and histochemical studies. *Microsc Res. Tech.* <https://doi.org/10.1002/jemt.24585>.

183. Singh D, Khanna S, Shunthwal J and Gowane GR (2023) Knowledge, attitude and practices towards rabies: A questionnaire-based study of the community in Haryana, India. *Haryana Vet.* **62(1)**: 30-34.

184. Singh D, Shunthwal J, Gowane GR and Khanna S (2024) Gender Differences in Moral Distress and Ethical Conflict: A Survey of Indian Veterinary Practitioners. *Agric. Sci. Dig.* **44(3)**: 571-579.

185. Singh H, Brar P, Honparkhe M, Singh N, Jan MH, Maharana BR, Dadarwal D (2023) Local and systemic inflammatory response to the intrauterine infusion of enzymes during estrus in water buffaloes with subclinical endometritis. *Res. Vet. Sci.* **162**: 104951. <https://doi.org/10.1016/j.rvsc.2023.104951>.

186. Singh H, Tewari AK, Maharana BR, Sudan V, Mishra AK, Singh R, Raina OK and Rao JR (2023) Studies on immunoprophylactic potential of recombinant mature surface antigen 2 (rSAG2) protein against *Toxoplasma gondii* infection. *J. Vet. Parasitol.* **37(1)**: 36-49.

187. Singh M, Lathwal SS, Prasad CK, Ruhil AK, Magotra A, Bidhan DS, Sharma V, Sandeep, Singh N and Amandeep (2023) Socio-economic profile and constraints of farmers rearing Haryana cattle. *Indian J. Dairy Sci.* **76(4)**: 1-7.

188. Singh M, Singh N, Sahu S, Bidhan DS, Sharma V, Dhillod S, Yadav DC and Amandeep (2023) Reproductive and productive performance of Murrah buffaloes on post-partum poly-herbal supplementation. *AATCC Reviews.* **11(3)**: 172-175.

189. Singh P, Kumar V, Bagri P, Lather D and Kant V (2024) Acute oral toxicity study of quinalphos in male Swiss albino mice. *Haryana Vet.* **62(1)**: 133-137.

190. Singh PK, Jairath, Gauri, Yadav S, Pathera AK, Yadav S, Singh R, Shrivastav N and Karmore SK (2024) Understanding the association of particle size, fat content and tumbling time in chevon meat slice quality while its optimization. *Ann. For Res.* **67(1)**: 325-341.

191. Singh R, Singh G, Kumar K, Khatri S and Malik A (2023) Determinants of job satisfaction among faculty members of a veterinary university in India: an empirical study. *Current Psychol.* **43**: 7235-7245. <https://doi.org/10.1007/s12144-023-04902-9>.

192. Singh TP, Verma AK, Rajkumar VC, Manish K, Arora S and Rai B (2024) Investigating the impact of milk protein, inulin, and honey on quality attributes of goat milk yoghurt. *J. Food Sci. Technol.* **61**: 1598-1608. <https://doi.org/10.1007/s13197-024-05932-2>.

193. Singla S and Kumar P (2023) Histological and histochemical studies on the paraepiglottic tonsil of goats. *Clinical Res. Anim. Sci.* **3(2)**: 000558. DOI: 10.31031/CRAS.2023.03.000558.

194. Soni D and Chauhan SL (2023) A review of aflatoxins in milk: Occurrence, toxicity and detection. *Int. J. Veter. Sci. Anim. Hus.* **8(4)**: 16-20.

195. Soni D, Khushbu, Moudgil P and Jadhav VJ (2024) A cross-sectional survey of knowledge and practices related to cyromazine usage among layer Farmers of Haryana. *Eco. Env. Cons.* **30**: 409-413 <http://doi.org/10.53550/EEC.2023.v30i01s.082>.

196. Soni D, Khushbu, Moudgil P, Bangar YC and Jadhav VJ (2024) Development of QuEChERS method for





simultaneous detection of cyromazine and melamine residues in eggs. *J. Food Compos Anal.* 128: 106025 <https://doi.org/10.1016/j.jfca.2024.106025>.

197. Sonu, Hariom, Kumar A and Charaya G (2023) Symmetric Dimethylarginine (SDMA) as Biomarker of Chronic Kidney Diseases in Dogs. *Indian J. Vet. Sc Biotechnol.* **20(1)**: 108-110.

198. Sonu, Hariom, Kumar A, Verma A, Sweety and Charaya G (2024) Cystatin C as biomarkers of chronic kidney diseases in the dog. *Int. J. Adv. Biochem. Res.* **8(3S)**: 360-361.

199. Subhash, Lather D, Gupta R, Nehra V, Singh S, Gupta RP, Saini P and Narang G (2024) Pathobiological investigations in ruminants affected with gastrointestinal disorders due to paratuberculosis disease. *Int. J. Agricul. Ext. Social. Dev.* **7(6)**: 361-369. <https://doi.org/10.33545/26180723.2024.v7.i6e.727>.

200. Subhash, Lather D, Kumar R, Kumar D, Nehra V and Prakash A (2024) Pathological investigations of liver affections in small ruminants suspected with gastrointestinal tract disorders. *Int. J. Adv. Biochem. Res.* **8(3)**: 699-700.

201. Subhash, Lather D, Kumar R, Kumar D, Nehra V and Prakash A (2024) Investigations on Escherichia coli serotypes isolated in buffalo species suspected with gastrointestinal tract disorders. *Int J Adv Biochem Res.* **8(3)**: 697-698.

202. Subhash, Lather D, Kumar R, Kumar D, Nehra V and Prakash A (2024) Detection of multidrug-resistant Enterobacteriales isolated from buffalo species. *Int. J. Adv. Biochem. Res.* **8(3S)**: 691-693. DOI: 10.33545/26174693.2024.v8.i3Si.864.

203. Subhash, Lather D, Kumar R, Kumar D, Nehra V and Prakash A (2024) Identification of opportunistic bacteria in buffalo species suffered with gastrointestinal tract disorders. *Int. J. Adv. Biochem. Res.* **8(3S)**: 694-696. 10.33545/26174693.2024.v8.i3Si.865.

204. Subhash, Lather D, Nehra V, Jangir BL, Sushma, Saini P and Narang G (2024) Investigations on pathomorphological alterations in ruminants affected with gastrointestinal tract disorders. *Int. J. Res. Agronomy.* **7(6)**: 652-658. <https://doi.org/10.33545/2618060X.2024.v7.i6i.946>.

205. Tewatia BS, Jyotsana, Singh A, Meetu, Panwar VS and Maan NS (2023) Effect of organic zinc and copper supplementation on growth performance, nutrient utilization and mineral balance in Harnali lambs. *Indian J. Anim. Nutri.* **40(2)**: 144-150.

206. Thakur R, Biswal P, Sari TP, Kumar D, Sagar NA, Bhardwaj S, Chandraatre GA and Tarafdar A (2024) Therapeutic effect of goat milk and its value-addition: current status and way forward. *J. Food Sci. Tech.* **1**: 11.

207. Thakur R, Chandrahas, Kumar N, Gaur GK, Singh M, Tarafdar A, Verma MR, and Tiwari V (2024) Changes in microbiota and parasitic load of poultry manure undergoing value addition through different techniques for their safe disposal or utilization. *Indian J Exp Biol.* **62**: 199-205.

208. Thakur R, Chandrahas, Tarafdar A, Yadav S, Gaur GK, Singh M, Verma MR, Kumar N and Godara R (2024) Potential of layer excreta as a substrate for sustainable production of green energy. *Biomass Conv Bioref.* [https://ui.adsabs.harvard.edu/link\\_gateway/2024BioCB.tmp.279T/doi:10.1007/s13399-024-05613-2](https://ui.adsabs.harvard.edu/link_gateway/2024BioCB.tmp.279T/doi:10.1007/s13399-024-05613-2).

209. Vaishali, Gupta R, Kumar M, Bansal N, Vivek, Kumar P, Kumar P and Jindal N (2023) Coinfection of porcine astrovirus and other porcine viruses in diarrheic pigs in Haryana, India. *Arch Virol.* **168(10)**: 246. <https://doi.org/10.1007/s00705-023-05865-9>.

210. Verma A, Chandolia RK, Sweety, Sonu, Hariom, Pandey AK, Soni N and Kumar S (2024) Ultrasonographic assessment of buffalo's liver before and after caesarean section in relation to survival rate. *Int J Advan Biochem Res.* **8(3)**: 533-535.

211. Verma A, Phogat JB, Sweety, Sonu, Hariom, Phulia SK, Pandey AK, Sharma RK and Kumar S (2024) Effect of estrus on vaginal and vulvar temperature following induction of estrus during winter and summer in anestrus Murrah buffalo and heifer. *Int J Advan Biochem Res.* **8(3)**: 375-379.

212. Vinita, Sangwan SS, Bala A, Malik A, Gautam and Kumar R (2023) Assessment of dairy farmers knowledge about recommended green fodder





production practices in Haryana. *Eco. Environ. Conser.* **29**: S357-S362.

213. Vinita, Sangwan SS, Bala A, Singh U, Kumar K, Malik A and Gautam (2023) Socioeconomic profile of fodder production and feeding practices of dairy farmers: A study in Jind, Charkhadri and Yamunanagar districts of Haryana. *Int. J. Stat. App. Math.* **8(4)**: 193-197.

214. Vinita, Sangwan SS, Singh S, Bala A, Gautam, Malik A and Kumar R (2023) A study on relationship between socioeconomic attributes with knowledge and constraints of fodder production among dairy farmers of Haryana. *Int. J. Stat. App. Math.* **8(4)**: 176-179.

215. Yadav A, Kumar A, Kumar T, Sharma M, Punia S, Sangwan M and Sindhu N (2023) Hospital-based study on gastrointestinal impaction disorders in dairy buffaloes. *Indian J. Vet. Sci. Biotech.* **19(4)**: 34-38.

216. Yadav A, Kumar T, Kadeyan R, Kumar A and Sindhu N (2024) Epistaxis secondary to trypanosomiasis in *Bubalus bubalis*: Clinical report. *Int. J. Advan. Biochem. Res.* **8(6)**: 711- 713.

217. Yadav A, Kumar T, Kadeyan R, Kumar A and Sindhu N (2024) Regurgitation secondary to segmental torsion of intestine in a *Bubalus bubalis*: A case report. *Int. J. Advan. Biochem. Res.* **8(6)**: 545- 547.

218. Yadav A, Kumar T, Sindhu N and Kumar A (2023) Pimobendan an effective therapeutic drug for dilated cardiomyopathy in dogs: A short study. *Vet. Pract.* **24(2)**: 80-183.

219. Yadav A, Kumar T, Sindhu N and Kumar A (2024) Diagnosis of pericardial effusion in dogs: A short study. *Int. J. Advan. Biochem. Res.* **8(6)**: 540- 544.

220. Yadav DC, Bidhan DS, Amandeep, Kumar S, Kumar A, Lather D, Singh N and Sandeep (2023) Effects of Aloe Vera (*Aloe Barbadensis*) supplementation on hemato-biochemical parameters, gut morphology and toll-like receptors expression in layer chickens. *Indian J. Poult. Sci.* **58(3)**: 221-229.

221. Yadav DK, Malik ZS, Dash SS, Pushpa, Bangar YC and Magotra A (2024) Bayesian estimates of genetic effects on calf survival in Hardhenu (*Bos taurus* × *Bos indicus*) cattle. *J. Anim. Breed. Genet.* **141(1)**: 13-23.

222. Yadav DK, Malik ZS, Magotra A, Bangar YC and Pushpa (2024) Estimation of maternal and additive effect on reproduction and productive traits in Hardhenu cattle. *Reprod. Domest. Anim.* **59(7)**: e14658. (NAAS: 7.7).

223. Yadav JP, Batra K, Singh Y, Khurana SK and Jindal N (2024) Comparative study on conventional and real-time PCR assays for rapid and specific detection of *Mycoplasma gallisepticum* infection in poultry. *Microbe.* **3**: 100066. <https://doi.org/10.1016/j.microb.2024.100066>.

224. Yadav R, Kumar P, Prakash A and Bhanot V (2024) Comparative antibiogram analysis of bacterial isolates from mastitic milk of cattle and buffalo in Haryana. *Indian J. Dairy Sci.* **77(2)**: 123-129. <https://doi.org/10.33785/IJDS.2024.v77i02.004>.

225. Yadav R, Kumar P, Prakash A, Bhanot V, Cheema PS and Jindal N (2023) Antibiogram of bacterial pathogens causing mastitis among cattle. *Indian J. Ani. Sci.* **93(9)**: 858-864. <https://doi.org/10.56093/ijans.v93i9.127834>.

226. Yadav R, Prakash A, Kumar P and Bhanot V (2024) Antimicrobial profiling of mastitis causing bacteria in buffalo milk. *Indian J. Ani. Sci.* **94(4)**: 301–307. <https://doi.org/10.56093/ijans.v94i4.145718>.

227. Yadav R, Singh G and Yadav P (2023) Unlocking physiological transformations in riverine buffaloes following uterine torsion correction. *Indian J. Anim. Sci.* **93(12)**: 1155–1159.

228. Yadav R, Yadav P and Singh G (2023). Uterine torsion in buffaloes - A complete review. *Buff. Bull.* **42(4)**: 479 - 490.

229. Yadav T, Magotra A, Bangar YC, Kumar R, Yadav AS, Garg AR, Bahurupi P and Kumar P (2023) Effect of BsaA I genotyped intronic SNP of leptin gene on production and reproduction traits in Indian dairy cattle. *Anim. Biotechnol.* **34(2)**: 261-267.

## REVIEW PAPERS

1. Chaudhary V, Kajla P, Lather D, Chaudhary N, Dangi P, Singh P and Pandiselvam R (2024) Bacteriophages: a potential game changer in food processing industry. *Critical Rev. Biotechnol.* 1-25. [10.1080/07388551.2023.2299768](https://doi.org/10.1080/07388551.2023.2299768).





2. De AK, Gupta S, Perumal P and Bhattacharya D (2023) Unusual stories of transmission of diseases from plants to animal kingdom: Tale of phytonoses scripted. *Indian J. Anim. Health.* **62(2)**: 61-74. <https://doi.org/10.36062/ijah.2023.spl.00723>.

3. Jairath G, Bishnoi S, Verma M, Mal G, Singh B, Sharma R, Gopinath D and Rialch A (2023) The rise of alternative proteins Shaping the meat landscape in India. *Fleischwirtschaft Int.* **103(11)**: 78-81.

4. Kanwar A, Virmani M, Chaudhary K, Sharma R and Saini P (2023) The Control of Neuroendocrine Mechanisms in Livestock to Facilitate Adaptation to Stress. *J. Anim. Res. Vet. Sci.* **7**: 0.46. DOI:10.24966\ARVS-3751\100046.

5. Kaur S, Ratwan P, Kumar M and Singh A (2024) Overview of performance and genetic parameters of economic traits in Indian native chicken breed. *J. World Poult. Sci.* **10**. 1080/00439339.2024.2309528.

6. Kaur S, Saini S, Sharma P, Singh A, Kumar R and Kumar V (2023) Advanced interventions for assessing semen quality and enhancing bull fertility: A review. *Cattle Prac.* **31(11)**: 2-23.

7. Kumar S, Magotra A, Kumar M, Dalal DS and Kumari S (2023) Semen sexing and its impact on fertility and genetic gain in cattle. *Zygote*. <https://doi.org/10.1017/S0967199424000066>.

8. Malik A, Kamaldeep and Priyanka (2024) Sustainable development of livestock—case for gender equality. *Int. J. Vet. Sci. Anim. Hus.* **9(3)**: 291-293.

9. Minhas SK, Kumar P, Panghal R, Mehtani R, Yadav R, Kalonia S and Gowthaman V (2024) Fowl pox virus: a minireview. *World Poult Sci J.* **80(2)**: 329-347.

10. Nehra V, Kumar A and Kakker NK (2024) Globalization and Internationalization of Higher Education: Indian Scenerio @ Viksit Bharat 2047. *University News: A Weekly J. Higher Edu.* **62(16)**: 171-178.

11. Sharma S, Kumar N, Rouse BT, Sharma K, Chaubey KK, Singh S and *et al.* (2024) The role, relevance and management of immune exhaustion in bovine infectious diseases. *Helijon.* **10**: e28663; doi:10.1016/j.helijon.2024.e28663.

12. Thakur R, Biswal P, Sari TP, Kumar D, Sagar NA, Bhardwaj S, Chandratre GA and Tarafdar A (2024) Therapeutic effect of goat milk and its value-addition: current status and way forward. *J. Food Sci. Tech.* **1**: 1621-1631.

### POPULAR ARTICLES

1. Arora S (2024) Strategies to Check Milk and Milk Product Adulteration. *Indian Dairyman.* 94-98.
2. Bhagwan J, Chaudhari M and Kalkal H (2023) Brucellosis- A zoonotic disease in Swine. *Pashudhan Praharee*.
3. Bhagwan J, Chaudhari M and Kalkal H (2023) Routine Farm Operations at Pig Farm. *Pashudhan Praharee*.
4. Bhagwan J, Chaudhari M and Sangwan S (2023) Johne's disease in cattle. *Pashudhan Praharee*.
5. Bhagwan J, Chaudhari M and Sangwan S (2023) Tuberculosis in cattle. *Pashudhan Praharee*.
6. Chaudhary M, Bhagwan J and Jakhar V (2023) Deworming and its significance in Pig Farming. *Pashudhan Praharee*.
7. Chaudhary M, Bhagwan J and Jakhar V (2023) Diseases of Pre-weaning mortality in pigs. *Pashudhan Praharee*.
8. Chaudhary M, Bhagwan J and Jakhar V (2023) Factors of Pre-weaning mortality in pigs. *Pashudhan Praharee*.
9. Chaudhary M, Bhagwan J and Jakhar V (2023) Grishamkalin Ritu me Kukut Parbandhan. *Pashudhan Praharee*.
10. Chaudhary M, Bhagwan J and Jakhar V (2023) Infectious Diseases of Swine. *Pashudhan Praharee*.
11. Chaudhary M, Bhagwan J and Jakhar V (2023) Pashupalan me Apda Parbandhan. *Pashudhan Praharee*.
12. Dhillod S, Bidhan DS, Singh N, Singh M and Sharma V (2024) Animal welfare: Five freedoms and five domains. *The Science World.* **4(5)**: 1860-1863.
13. Dhillod S, Chugh P, Singh N, Bhavishya, Sharma V and Singh M (2024) Care and Management practices of pregnant cows. *The Science World.* **4(6)**: 2261-2265.
14. Gupta S, Kumar A, Pooja, Kadyan A, Kumar T and Sindhu N (2023) Animal welfare: The Need of the





hour-Embracing Compassion and Responsibility. *Pashudhan Praharee*.

15. Kajal S, Gupta S and Gupta S (2023) Unlocking insights: The significance of in vitro cultivation for haemoprotzoan parasites of veterinary importance. *The Scientific World*.

16. Kaur S, Singh A, Sindhu N and Yadav S (2024) Concept of theory of evolution and gene transmutation. *Veterinary today*. **2(04)**: 1-2.

17. Kumar P, Bishnoi S and Rani M (2023) Heat Stress and Associated Effects on meat Quality. *The Agriculture magazine*: 162-165.

18. Kumar P, Bishnoi S and Yadav S (2023) Drying of meat: benefits and challenges. *Foods and beverages*. 14-15.

19. Kumar S and Singh N (2024) Role of omega-3 and omega-6 fatty acid rich oil in plasma metabolites, homeostasis and reproduction of heifer cows. *Livestock technology*. **13(9)**: 14-15.

20. Kumar S, Saharan V, Singh N and Sihag S (2023) Alteration in rumen microbial dynamics due to PUFA oil rich diet in dairy cows. *The Science World*. **3(07)**: 1249-51.

21. Lakhani N, Lakhani P and Singh G (2024) Summer stress management in Dairy animals. *Dairy Planner*.

22. Rani M and Arora N (2023) Canine cardiac diseases: Etiology, Clinical signs, diagnosis and treatment. *Vet Helpine-e Magazine*. **11**: 01-17.

23. Ruhil S, Potliya S, Singh H, Maharana BR and Gangul A (2023) Management of secondary uterine inertia in crossbred sow by caesarean section. *J. Domestic Anim. Practice and Res.* **1(1)**: 25-27.

24. Sharma N and Batra K (2023) Pregnancy diagnosis in buffalo with molecular techniques:current status and future benefits. *The Science world*. **3(07)**: 1848 -1851.

25. Sheoran NK, Ashish, Ratwan P and Kumar M (2023) From Ancient DNA to ModernLivestock: Paleogenomics. *Int. J. Genetic Modifications and Recombinations*. **1(2)**.

26. Singh N, Dhillod S, Sharma V and Singh M (2024) Wastewater reclamation technologies for sustainable Dairy farming. *The Science World*. **4(6)**: 2087-2089.

27. Vijayalakshmy K, Virmani M and Biswal J (2023) Clinical disorders associated with Phosphorous. *Poultry Line*. **23(10)**: 42.

28. Vijayalakshmy K, Virmani M and Biswal J (2023) Metabolism of magnesium and its associated disorders. *Poultry Line*. **23(10)**: 89.

29. Vijayalakshmy K, Virmani M and Biswal J (2023) Metabolism of Potassium and its associated disorders. *Poultry Line*. **23(11)**: 43.

30. Vijayalakshmy K, Virmani M and Biswal J (2023) Metabolism of sodium and its associated clinical disorders. *Poultry Line*. **23(11)**: 44.

31. Yadav A, Sindhu N, Kumar T, Kumar A, Kadyan R and Pooja (2023) Veterinarian Responsibilities within "One World- One Health" Framework. *Pashudhan Praharee*.

### BOOK(S) EDITED

1. Kakker NK, Virmani M and Sharma V (2024) LUVAS Intellectual properties for commercialization moving forward. Directorate of Human Resource Management, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-0-9.
2. Pandey AK, Dutt R, Kumar S, Kumari S, Singh G and Jasmer (2024) Book of Research abstracts - Paper presented at "Livestock health and poultry: A paradigm change to maximize productivity for sustainable farmers' livelihood" at 24<sup>th</sup> Indian Veterinary Congress and 31<sup>st</sup> Annual Conference of IAAVR, LUVAS, Hisar (Haryana) on February 7-8, 2024 pp: 1-260. ISBN:978-81-970-301-9-2.
3. Pandey AK, Kumar D and Kumar S (2024) Prajanan Se Utpadan Tak: Pashupalak Margdarshika. ISBN: 978-81-970301-2-3.
4. Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (2024) Nanotechnology Theranostics in Livestock Diseases and Management. 1<sup>st</sup> Edn. Springer Nature Singapore. ISBN: 978-981-16-1609-9ISBN 978-981-16-1610-5 (eBook) <https://doi.org/10.1007/978-981-16-1610-5>.

### BOOK CHAPTERS

1. Ali A, Deka D, Thakur V and Kumar A (2023) Accidental pesticide poisoning and their management in dairy animals. In: Dairy animals: health issues and common diseases, Learning media publication,





Meerut, pp: 80-85. ISBN: 978-93-91872-85-4.

2. Amandeep, Kumar N, Godara RS and Thakur V (2023) Strategies of waste management on dairy farm. In: "Insights of dairy animals management for progressive farmers. pp. 112-115. ISBN: 978-93-91872-50-2.

3. Arora N, Saharan N and Kumar R (2024) Nanotechnology in fracture management. In: Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (ed) Nanotechnology theranostics in livestock diseases and management, 1st edn., Springer Nature, Singapore. 615-642. ISBN 978-981-16-1609-9.

4. Arora S, Sharanagouda B, Rachna, Shweta and Shiv (2024) Navigating Challenges in Dairy Waste Management: Towards Sustainable Solutions. Dairy in India-2024. YEAR BOOK: 37-42.

5. Chandratre GA (2023) Collection, preservation, processing, and dispatch of clinical material of goats. In: Rana T (Ed) Principles of goat disease and prevention, Wiley Blackwell. pp: 49-61. ISBN: 978-1-119-89612-8.

6. Charaya G, Kaur J and Pandey AK (2024) Pashuon mein prathmik chikitsa v tikakaran sarni. In: Prajanan se utpadantak: pashupalakmargdarshika. LUVAS Hisar. pp. 25-26. ISBN: 978-81-970-301-9-2.

7. Chaudhary V, Kajla P, Luthra A and Siwach R (2023) Whey: As a Low-Cost Substrate for the Production of Biosurfactants In: Poonia, A., Trajkovska Petkoska, A. (eds) Whey Valorization. Springer, Singapore.

8. Chhabra R, Singh M and Manoj J (2023) Combating bacterial zoonoses-insights into brucellosis. In: Deepak Kumar Sharma and Rajesh Singathia (ed). Realization of one health concept through new age research technologies. Yash publishing house, Bikaner. 65-71.

9. Chhabra R, Singh M and Manoj J (2024) Combating bacterial zoonoses-insights into brucellosis. In: Sharma DK and Singathia R (ed). Realization of one health concept through new age research technologies. Yash publishing house, Bikaner. pp:65-71. ISBN No. 978-81-86882-51-0.

10. Chowdhury A, Mamatha D, Chakravarti S, Kumar R (2024) Nanotechnology in veterinary hospital management. In: Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (ed). Nanotechnology theranostics in livestock diseases and management. 1st edn. Springer Nature, Singapore. ISBN 978-981-16-1609-9.

11. Dutt R and Sujata(2023) Anestrus and its management. In: Feline reproduction- the theory and practice. Elite Publishing House. Publisher and Distributor, New Delhi. 37-41.

12. Dutt R, Sujata and Yadav U (2024) Gaay evam bhainso mein firaak padna (Repeat breeding). In: *Prajnan se utpadantak: Pashupalak margdarshika*. LUVAS, Hisar. pp. 25-26. ISBN: 978-81-970-301-9-2.

13. Ghosh M and Kumar R (2024) Regulatory issues in nanotechnology. In: Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (ed). Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN 978-981-16-1609-9.

14. Ghosh M, Chowdhury A, Kumar R (2024) Nanotheranostics in personalized veterinary medicine. In: Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (ed). Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN 978-981-16-1609-9.

15. Ghosh M, Chowdhury A, Kumar R, Syed SM, Chakravarti S and Prasad M (2024) Introduction and scope of nanotechnology in veterinary science. In: Prasad M, Kumar R, Ghosh M, Syed SM and Chakravarti S (ed). Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.

16. Gupta R, Sharma V, Gupta S and Ratwan P (2023) Souvenir-cum-book of abstracts: International symposiumon "Promotion of one health: opportunities, challenges and solutions" and XIX annual conference of Indian association of veterinary public health specialists.

17. Gupta S, Gupta S, Thakur V and Kumar A (2023) Breaking the parasitic cycle in dairy animals. In: Insights of dairy animals management for progressive farmers. Learning media publication, Meerut, pp. 86-91. ISBN:978-93-91872-50-2.





18. Hitesh, Poonia A, Bala A, Singh H and Singh H (2023) Laboratory tests for pregnancydiagnosis. In: Research trends in animal science. Bhumi Publishing House, Kohlapur-416207, India. ISBN: 978-93-88901-734.

19. Jangir BL, Nehra V, Sharma M and Jakhar KK (2024) Role of clinical veterinary pathology in routine diagnosis: an introduction. In: Singh G, Kumar T, Sindhu N and Agnihotri D (eds.), Veterinary internship: a text book cum exercise guide. 6<sup>th</sup> Edn. LUVAS, Hisar, (Haryana), India. pp. 174-192.

20. Jawre S, Jadav KK, Tiwari DK, Arora N, Kumar R and Maurya K (2024) Nanotechnology in wildlife management. In: Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore ISBN 978-981-16-1609-9.

21. Jhambh R, Singh Y and Arya K (2024) Ketosis in dairy animals: Causes, detection andscientific recommendations for prevention. In: Prajanaan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). pp. 113-114. ISBN: 978-81-970301-2-3.

22. Joshi VG, Tiwari M, Singh M, Khirbat R and Maan S (2023) Point-of-care diagnostics using molecular approaches. In: Mukhopadhyay CS, Choudhary RK, Panwar H and Malik YS (ed). Biotechnological interventions augmenting livestock health and production. Springer publisher. pp. 281-295. ISBN 978-981-99-2208-6; ISBN 978-981-99-2209-3 (eBook).

23. Jyotsana and Sheoran N (2024) Antravastha kaal (transitiiton period) kal mein pashuon ka poshan parbandhan. In: Prajanaan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3.

24. Kajal S, Gupta S and Gupta S (2023) Collection, preservation and processing and dispatch of clinical materials. In: T. Rana (Ed.) Key Questions in Preventive Farm Animals, CAB International. pp. 135-177.

25. Kajal S, Nehra V, Lather D and Jangir BL (2024) Necropsy and diagnostic evaluation. In: T. Rana (Ed.) Key questions in clinical farm animal medicine, Volume 3: Therapy, prevention and control of disease. CAB International. pp. 47-94.

26. Kandpal D, Lather D, Nehra V and Jangir BL (2023) Pathology of protein misfolding diseases in animals. In: Edward Narayan (edt.). Animal science. Intech Open. doi: 10.5772/intechopen.112405 ISBN: 978-0-85014-526-7

27. Kaswan S, Chandratre GA, Upadhyay D, Sharma A, Sreekala SM, Badgujar PC, Panda P and Ruchay A (2024) Applications of sensors in livestock management. In: Engineering applications in livestock production Elsevier Academic Press, pp. 63-92. <https://doi.org/10.1016/B978-0-323-98385-3.00004-9>.

28. Kumar A, Batra K and Maan S (2024) Nano-vaccines in animal health. In: Vibha Yadav, RK Joshi, D Niyogi, SV Singh, Rajesh Kumar (eds). Advances in nanotechnology and its application in animal health. ABS Books Delhi-110086.

29. Kumar A, Pooja, Thakur V and Ali A (2023) Common plant poisoning in dairy animals. In: Dairy animals: health issues and common diseases, Learning media publication, Meerut, pp. 76-79. ISBN: 978-93-91872-85-4.

30. Kumar A, Yadav A, Thakur V and Gupta S (2023) Common haemoprotzoan diseases of dairy animals. In: Dairy animals: health issues and common diseases, Learning media publication, Meerut, pp. 47-52. ISBN: 978-93-91872-85-4.

31. Kumar M, Jadhav VJ, Mittal D and Khurana R (2024) General principles and concepts of milk hygiene in public health.In: T. Rana (Ed), Developments in microbiology: the microbiology, pathogenesis and zoonosis of milk borne diseases, Academic Press, 2024. pp. 3-18. ISBN: 9780443138058.

32. Kumar N (2024) Behtar vikas ke liye navjat bachre ki dekhbhal avm parbandhan. In: Prajanaan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). pp. 97-101. ISBN: 978-81-970301-2-3.

33. Kumar N, Amandeep, Thakur V and Maurya V (2023) Strategies for amelioration of heat stress in dairy animal. In: Insights of dairy animals management for progressive farmers. pp. 92-97. ISBN: 978-93-91872-50-2.





34. Kumar P and Arya K (2023) Diseases of the liver and pancreas. In: Key questions in clinical farm animal medicine, volume 1. ISBN-13: 9781800624764 (paperback) 9781800624771(ePDF) 9781800 624788(ePub).
35. Kumar P and Punia S (2023) Diseases of nervous system. In: Principles of disease examination, diagnosis and management. Rana T (ed). Key questions in clinical farm animal medicine, volume 1., CAB International, UK. 273-309.
36. Kumar P and Punia S (2023) Diseases of urinary system. In: Rana T (ed). Key questions in clinical farm animal medicine, volume 2. In: Types, causes and treatments of infectious disease, CAB International, UK. pp. 1-38
37. Kumar P and Arya K (2023) Diseases of liver and pancreas. In: Rana T (ed). Key questions in clinical farm animal medicine, volume 1. In: Principles of disease examination, diagnosis and management, CAB International, UK. pp. 273-309.
38. Kumar R, Banerjee S, Akshita, Prasad M and Ghosh M (2024) Nanotherapeutics for bacterial livestock diseases. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.
39. Kumar R, Chowdhury A, Mamatha D, Rose MK and Ghosh M (2024) Nanotechnology in protozoan livestock disease diagnosis. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.
40. Kumar R, Chowdhury A, Rose MK, Sindhu S, Syed SM and Ghosh M (2024) Nanotechnology in prophylaxis of viral livestock diseases. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.
41. Kumar R, Kumar S, Gupta RK and Yadav I (2024) Avian model for biomedical research. In: Animal models in research: principles and practice. Springer. pp. 169-190.
42. Kumar R, Lakhani P, Kumar AYN and Ghosh M (2024) Nanotoxicity and mechanisms. In: Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.
43. Kumar R, Malik HN, Mohapatra SK, Kumari K, Chowdhury A and Ghosh M (2024) *Nanointerventions* in the treatment of protozoan livestock diseases. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9 ISBN 978-981-16-1610-5.
44. Kumar S and Sihag S (2024) Prasvo-upraant dudharu pashuon ke liye aahaar prabandhan. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3.
45. Kumar S, Kumari S and Rahul (2024) Gai aur Bhains mai bachaedani ka ghumav. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3.
46. Kumar S, Nidhi, Soni S, Sharma KK, Kumar R and Mohan H (2024) Nanosensors: types and customisation. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature Singapore. ISBN: 978-981-16-1609-9.
47. Kumar S, Sharma S, and Pandey AK (2024) Kam umar me pashu ko shighr-ati-shighr grabhit krne hetu apnayi jaane wali tachniq. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3.
48. Kumar T, Sindhu N and Kumar A (2024) gany avm bhains me prasvuprant lahumutna rog. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3 p.115.
49. Kumari S, Kumar S and Kumar S (2024) Gai- bhains mai madh chakar. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3.
50. Maurya V, Tripathi UK, Thakur V and Kumar N (2023) Principles of dairy housing. In: Insights of dairy animals management for progressive farmers pp. 15-21. ISBN: 978-93-91872-50-2.
51. Nidhi, Kumar S, Yadav N, Kumar R and Mohan H (2024) Nanosensors in veterinary disease detection. In: *Nanotechnology theranostics* in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.





diseases and management. 1st Edn. Springer Nature, Singapore. ISBN: 978-981-16-1609-9.

52. Pandey AK, Singh G and Kumar S (2024). Application of ultrasonography for buffalo herd fertility management. In: Patra MK, Saxena AC, Kumar B, Tarafdar A, Pandey HO, Singh M (Eds.). Advanced reproductive ultrasonography techniques in diagnostic precision of reproductive health and disorders in farm and pet animals. DST-SERB sponsored high-end workshop, Livestock Production and Management Section, ICAR- Indian Veterinary Research Institute, Izatnagar (UP) India. p. 145. ISBN: 978-93-6076-506-4.

53. Pandey H, Kumar N and Pandey M (2023) Navjat memno ka vaygyanik parbandhan. In: Bakri palan dwara udhmitavikas. ICAR- Indian Veterinary Research Institute, Izatnagar (UP) India. pp. 98-102. ISBN: 978.93.6013.205.7.

54. Rai S, Yadav P, Debnath N, Arora S, and Yadav AK (2023) Role of Probiotics in Gut Micro-Flora., in Frontiers in Food Science and Food Process Engineering: Novel Technologies, Safety, Packaging, Nanotechnology and Human Health, edited by Dr. Junaid Ahmad Malik, Prof. Megh R. Goyal, and Anu Kumari, Springer Nature.

55. Ruhil S, Khichar V, Thakur V and Maharana B R (2023) Infertility in dairy animals: A hurdle unsuccessful dairy farming. In: Thakur V, Singh RK, Chauhan S (Eds). Dairy animals: health issues and common diseases. Learning media publication, Meerut. pp. 92-97. ISBN: 978-93-91872-85-4.

56. Ruhil S, Khichar V, Thakur V and Maharana BR (2023) Utility of sex sorted semen in dairy sector: current and it's future prospective. In: Insights of dairy animals management for progressive farmers. Thakur V, Singh RK (Eds). Learning Media Publication, Meerut. pp. 10-14. ISBN: 978-93-91872-50-2.

57. Salaria S, Arora S, Mehla R, Singh TP and Anuj (2023) Recent Developments for Formulation of Infant Foods, in Frontiers in Food Science and Food Process Engineering: Novel Technologies, Safety, Packaging, Nanotechnology and Human Health, edited by Dr. Junaid Ahmad Malik, Prof. Megh R. Goyal, and Anu Kumari, Springer Nature.

58. Sindhu N, Kumar S and Kumar R (2024) Nanotechnology in wound healing. In: Nanotechnology theranostics in livestock diseases and management. 1<sup>st</sup> Edn. Springer Nature Singapore. ISBN: 978-981-16-1609-9.

59. Singh G and Yadav R (2023) Gay bhains me Garbhavastha ke lakshan, Garbh ki janch evm garbhit pashu ki dekhbhali. In: Prajanan se utpadantak: pashupalak margdarshika, LUVAS, Hisar (Haryana). ISBN: 978-81-970301-2-3:13-16.

60. Singh N, Batra K, Singh D, Kumar SM and Maan S (2024). Role of zinc in veterinary medicine. In: Zinc: early development, applications and emerging trends.1<sup>st</sup> Edn. Boca Raton, CRC Press. DOI: 10.1201/9781003412472-12.

61. Singh P, Sharma S, Dixit V, Chaube KK, Sharma S, Aggrawal K, Nagrami FH, Kumari P and Tripathi VL. (2024). Synthesis, characterization, and applications of carbon nanotube. In: Carbon-based nanomaterials: synthesis, agricultural, biomedical, and environmental interventions. Springer. ISBN: 978-981-97-0239-8 ISBN: 978-981-97-0240-4 (eBook).

62. Thakur R, Baghel M, Bhoj S, Jamwal S, Chandratre GA, Vishaal M, Badgujar PC, Pandey HO and Tarafdar A (2024) Digitalization of livestock farms through blockchain, big data, artificial intelligence, and internet of things. In: Tarafdar A(ed). Engineering applications in livestock production, Elsevier Academic Press. pp. 179-206.

63. Yadav A, Kumar T, Sindhu N, Kumar A, Mudgil N and Kumar A (2024) Nanotechnology in animal and microenvironment management. In: Livestock diseases and management, Springer publication, 379. ISSN: 2662-4346.

64. Yadav S, Kumari B, Thakur N, Kumar S and Bharti VK (2023). Livestock meat and fish presence of potential adulterants, contaminants, and their detection. In: Handbook on food adulterants and contaminants- detection, chemistry and health hazards. NIPA, New Delhi. Chapter 17.

65. Yadav S, Sinha A, Pramanik A, Tyagi S, Shrivastava C, Rajput P, Pal AK, Chaubey KK, Jayaraman S, Kushwah M, Dayal D, Verma DK, Bahuguna R, Sharma S and Joshi MD. (2023). Past, present and





possible future application of nanoparticle in contaminated soil remediation. Springer Nature Singapore, [https://doi.org/10.1007/978-981-99-2874-3\\_3](https://doi.org/10.1007/978-981-99-2874-3_3).

66. Yadav S, Thakur N and Bishnoi S (2024) Valorizing plant by products: Enhancing functional value of meat products. In: Training booklet of winter school on 'Advances in processing and quality appraisal of functional livestock products' organized by Department of Livestock Products Technology, College of Veterinary and Animal Sciences, SVPUAT, Meerut, from February 23- March 14, 2024. pp. 134-138.

### CHAPTERS IN COMPENDIUM

1. Arora S (2024) Coconut Barfi –a traditional Indian dessert. Booklet edited under Scheduled Caste Sub-Plan - Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T.K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.
2. Arora S (2024) Mozzarella Cheese. Booklet edited under Scheduled Caste Sub-Plan - Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T. K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research New Delhi.
3. Arora S and Sharanagouda B (2024) Paneer: An Indian Cottage Cheese. Booklet edited under Scheduled Caste Sub-Plan - Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T. K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar, 125001, Haryana (India), Indian Council of Agricultural Research New Delhi.
4. Research New Delhi.
5. Arora S and Sihag S (2024) Strategies for transforming animal husbandry scenario in Haryana. Booklet edited under Scheduled Caste Sub-Plan - Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T.K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.
6. Arora S, Shiv and Shweta (2024) Shrikhand - a milk based sweet. Booklet edited under Scheduled Caste Sub-Plan-Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T. K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar, 125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.
7. Arora S, Shweta and Shiv (2024) Mishti Doi or Meetha Dahi. Booklet edited under Scheduled Caste Sub-Plan-Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T. K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.
7. Arora S, Vekariya YK and Kathiriya M (2024) Hygienic Design Features of Dairy Equipment: Present Status and Future Requirements. Booklet edited under Scheduled Caste Sub-Plan - Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, College Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T. K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-





125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.

8. Jyotsana (2024) Pashu khadyapdarthkhridte-samaysavdhaniya v tarike, gunvatta ki janch mein namune ka mahtav. In: Compendium for the training 'Santulitaahar v khanijmishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

9. Jyotsana (2024) Poultry ke aahar me millets ka upyog. In: Compendium for the training 'Santulitaahar v khanijmishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

10. Jyotsana, Ritu, Meetu, Sheoran N and Panwar VS (2024) Scientific swine feeding management practices. In Compendium: 3-days National workshop-cum-training on 'Scientific pig rearing practices' from March 04-06, 2024 organized by Department of Livestock Farm Complex, LUVAS, Hisar.

11. Kumar M, Ratwan P, Kumari S, Kumar N, Sharma S and Panwar VS (2024) Major breeds of pig, selection of superior quality male and female and breed improvement through breeding and selection. In Compendium: 3-days National workshop-cum-training on 'Scientific pig rearing practices' from March 04-06, 2024 organized by Department of Livestock Farm Complex, LUVAS, Hisar.

12. Kumar P, Arora S and Sharanagouda B (2024) Cream Separation. Booklet edited under Scheduled Caste Sub-Plan-Advanced milk and milk product processing for farmers, compilation and editing by Sajjan Sihag, Shalini Arora and Rachana, Lala Lajpat Rai University of Veterinary and Animal Sciences Hisar-125004, Haryana (India). Publication T.K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.

13. Kumar S (2023) Dudharu pashuon ki dugdh utpaadana kshamta badhaane hetu aahaar banana. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

14. Kumar S (2023) Pashu aahaar ka vargi-karan. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

15. Kumar S (2023) Pashu aahaar sayantralagaan ave rakh-rakhav. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

16. Kumar S (2023) Varsh-bhar hare chaare ki upalabdhta aur santulit poshan ke liye chaare ka sanrakshan. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mhtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.

17. Kumar S, Berwal RS and Sheoran N (2023) Santulit aahar v khanij mishran ka pashupalan me mhtav. Compendium for training for schedule caste youths organized by Department of Animal Nutrition from November 02-08, 2023.

18. Kumar S, Berwal RS and Sheoran N (2024) Santulit aahar v khanij mishran ka pashupalan me mhtav. Compendium for the training for schedule caste youths organized by Department of Animal Nutrition from February 02-08, 2024.

19. Neha, Amandeep, Yadav DC and Sandeep (2023) Buffalo Production Management. In: Compendium of National Workshop-cum-training from October 25-27, 2023.

20. Panwar VS, Kumar M and Ratwan P (2024) Current status and future prospects of pig farming in India. In Compendium: 3-days National workshop-cum-training on 'Scientific pig rearing practices' from March 04-06, 2024 organized by Department of Livestock Farm Complex, LUVAS, Hisar.

21. Sandeep and Malik M (2023) Advances in housing management of buffalo. Buffalo Production Management. Compendium. National Workshop-cum-training from October 25-27, 2023.

22. Sheoran N (2023) Batakh aur bater palan: kam lagat mein jyada munafa. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mhtav' for schedule caste youths organized by





Department of Animal Nutrition, LUVAS, Hisar.

23. Sheoran N (2023) Fasal avsheel prabandhan prayavaran sanrakshan mein ek pahal. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mehtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.
24. Sheoran N (2023) Mota Anaj: Poshak tatvon ka khazana. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mehtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.
25. Sheoran N, Sarita and Rani M (2023) Dudh mein paye jane vale poshak tatv avum dudh ki postikta kaise badhayein. In: Training manual for schedule caste youths organized by Department of Livestock Product Technology, LUVAS, Hisar.
26. Sheoran N, Sarita and Rani M (2023) Gayn aur bhains ke dudh mein vasa (Fat) aur SNF ki matra bhadhane ke asan tarike. In: Training manual for schedule caste youths organized by Department of Livestock Product Technology, LUVAS, Hisar.
27. Sihag S (2023) Feeding management of calves and heifers. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mehtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.
28. Sihag S (2023) Improvement in economic status of Scheduled Caste Family through Livestock Farming. In: Compendium for the training 'Santulit aahar v khanij mishran ka pashupalan me mehtav' for schedule caste youths organized by Department of Animal Nutrition, LUVAS, Hisar.
29. Sihag S, Arora S and Rachana (2024) Advanced milk and milk product processing for farmers, Booklet edited under Scheduled Caste Sub-Plan, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar-125004, Haryana (India). Publication T.K. Dutta, Navneet Saxena and Gururaj M., ICAR-Central Buffalo Research Institute, Hisar-125001, Haryana (India), Indian Council of Agricultural Research, New Delhi.
30. Singh TP, Jangra S and Siwach R (2024) Doodh or doodh utpad parshanshkaran mein swachhata aur

gunwatta niyantran published In Compendium of training on "Kisano k liye unnat doodh or doodh utpad parshanshkaran" conducted at CODST, LUVAS, Hisar and published by CIRB, Hisar.

31. Siwach R and Singh TP (2024) Doodh gunwatta mapdand aur parikshan published In Compendium of training on "Kisano k liye unnat doodh or doodh utpad parshanshkaran" conducted at CODST, LUVAS, Hisar and published by CIRB, Hisar.

## LEAD PAPERS

1. Bagri P, Tiwari V, Gupta G, Lohiya A, Kant V and Kumar V (2023) Animal welfare and Regulatory Pharmacology and toxicology. "Integrated animal health care system: opportunities and challenges" and "exploring new avenues for pharmacologists and toxicologists from employability perspective". In: XXIII Annual Conference of Indian Society of Veterinary Pharmacology & Toxicology and National Symposia held at RAJUVAS, Bikaner from November 03-04, 2023.
2. Bhattacharya D, De AK, Perumal P, Gupta S and Kumar A (2023) Mitogenome analysis of Rhipicephalus microplus complex: A vivid example of supergene approach Sustainable control of parasitic diseases for improved productivity of livestock in current scenario. In: 32<sup>nd</sup> NCVP and National Symposium at Patna, Bihar from November 29- December 1, 2023. pp. 40-53.
3. De AK, Bhattacharya D, Perumal P, Sujatha T, Sunder J, Mayuri SC, Sawhney S, Samaddar G, Gupta S and Chakurkar EB (2023) Reality of global climate change: hopping foot print of malaria and arbovirus journey. Prospects and challenges of environment and biological sciences in food production system for livelihood security of farmers (ICFPLS-2023). In: 2<sup>nd</sup> International conference organized by ICAR - Central Island Agricultural Research Institute, Port Blair, Andaman & Nicobar Islands, India from September 18-20, 2023.
4. Jangir BL, Saini P, Nehra V, Lather D, Kajal S and Narang G (2023) Standard operating procedures of poultry necropsy and gross lesions of important poultry diseases. In: Workshop-cum-Training Manual on "Fundamentals of anatomic pathology





and post-mortem examination of domestic animals and poultry" organized by Department of Veterinary Pathology in collaboration of Department of Veterinary Anatomy, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from September 26-28, 2023.

5. Jangir BL, Lather D and Nehra V (2023) Pathological insights: Harnessing histopathological techniques for infectious disease diagnosis. In: 36<sup>th</sup> ICAR CAFT Course on "Modern diagnostic and control approaches to safeguard livestock health" organized by ICAR Centre for Advanced Faculty Training, Department of Veterinary Microbiology, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from January 04-24, 2024.

6. Kajal S, Nehra V, Lather D, Jangir BL and Narang G (2023) Standard operating procedures related to post-mortem examination of large and small animals. In: Workshop-cum-training manual on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry" organized by Department of Veterinary Pathology in collaboration of Department of Veterinary Anatomy, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from September 26-28, 2023.

7. Kakker NK, Malik A, Rani M, Yadav S and Khurana R (2024) Dissemination of technologies developed by scientists of LUVAS for the Development of entrepreneurship by dairy farmers. Book of Research Abstracts. National Symposium on "Livestock Health and Poultry: A Paradigm Change to maximize Productivity for Sustainable Farmer's Livelihood". In: 24<sup>th</sup> Indian Veterinary Congress and 31<sup>st</sup> Annual Conference of IAAVR, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from February 07-08, 2024.

8. Lather D, Valecha S, Nehra V, Jangir BL, Kajal S and Narang G (2023) Essentials of sample collection at necropsy and dispatch to diagnostic laboratory for disease investigation. In: Workshop-cum-training manual on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry" organized by Department of Veterinary Pathology in collaboration of Department of Veterinary Anatomy, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from September 26-28, 2023.

9. Nehra V, Kajal S, Lather D, Jangir BL and Narang G (2023) Pathology of Important Diseases of Domestic Animals. In: Workshop-cum-training manual on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry" organized by Department of Veterinary Pathology in collaboration of Department of Veterinary Anatomy, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from September 26-28, 2023.

10. Nehra V, Lather D, Jangir BL, Kajal S, Narang G and Singh R (2023) Post-mortem examination of vetero-legal cases. Workshop-cum-training manual on "Fundamentals of anatomic pathology and post-mortem examination of domestic animals and poultry" organized by Department of Veterinary Pathology in collaboration of Department of Veterinary Anatomy, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from September 26-28, 2023.

11. Vohra S, Gupta S and Sharma D (2023) Epidemiology of helminths in large ruminants in India. Sustainable control of parasitic diseases for improved productivity of livestock in current scenario. In: 32<sup>nd</sup> NCVP and National Symposium at Patna, Bihar from November 29 - December 1, 2023.



**SEQUENCES SUBMITTED**

S. No.	Name of Authors	Title of sequence submitted	Admission No.
1.	Sharma R, Jangir BL, Jangir G, Magotra A, Saini P, Kumar A	Uncultured <i>Pasteurella</i> sp. isolate PM-89 KMT1 (kmt1) gene, partial cds	OQ943169.1
2.	Sharma R, Narang G, Jangir BL, Magotra A, Saini P, Kumar A	Uncultured <i>Pasteurella</i> sp. isolate PM-37 KMT1 (kmt1) gene, partial cds	OQ943170.1
3.	Sharma R, Narang G, Jangir BL, Saini P, Magotra A	<i>Mannheimia haemolytica</i> isolate MH-98lktc LktC (lktC) gene, partial cds	OQ943171.1
4.	Sharma R, Jangir BL, Narang G, Magotra A, Saini P	Uncultured <i>Mannheimia</i> sp. isolate MH-81 Rpt2 site-specific DNA-methyltransferase gene, partial cds	OQ943172.1
5.	Sharma R, Narang G, Jangir BL, Saini P, Magotra A	Bovine respirovirus 3 isolate BPI3/78 nucleocapsid (N) gene, partial cds	OQ942877.1
6.	Nain R, Jindal N, Kumar M, Kumar P, Jangir BL, Bidhan DS	<i>Staphylococcus aureus</i> strain 2024/C3 staphylocoagulase gene, partial cds.	PP801287.1
7.	Nain R, Jindal N, Kumar M, Kumar P, Jangir BL, Bidhan DS	<i>Staphylococcus aureus</i> strain LUVAS/2024 /C8 staphylocoagulase gene, partial cds	PP801286.1
8.	Nain R, Jindal N, Kumar M, Kumar P, Jangir BL, Bidhan DS	<i>Staphylococcus aureus</i> strain LUVAS/2024 /C7 staphylocoagulase gene, partial cds	PP801285.1
9.	Nain R, Jindal N, Kumar P, Kumar M, Jangir BL, Bidhan DS	<i>Staphylococcus aureus</i> strain C10 staphylocoagulase (coa) gene, partial cds	PP795018.1
10.	Nain R, Jindal N, Jangir BL, Kumar P, Kumar M, Bidhan DS	<i>Staphylococcus aureus</i> strain C9 staphylocoagulase (coa) gene, partial cds	PP795017.1
11.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain C5 staphylocoagulase (coa) gene, partial cds	PP795016.1
12.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M13 penicillin-binding protein gene, partial cds	PP768233.1
13.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M12 penicillin-binding protein gene, partial cds	PP768232.1
14.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M10 penicillin-binding protein gene, partial cds	PP768231.1
15.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M9 penicillin-binding protein gene, partial cds	PP768230.1
16.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M7 penicillin-binding protein gene, partial cds	PP768229.1
17.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M5 penicillin-binding protein gene, partial cds	PP768228.1
18.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M4 penicillin-binding protein gene, partial cds	PP768227.1
19.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M3 penicillin-binding protein gene, partial cds	PP768226.1





S. No.	Name of Authors	Title of sequence submitted	Admission No.
20.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M2 penicillin -binding protein gene, partial cds	PP768225.1
21.	Nain R, Jindal N, Kumar M, Jangir BL, Kumar P, Bidhan DS	<i>Staphylococcus aureus</i> strain M1 penicillin -binding protein (mecA) gene, partial cds	PP763466.1
22.	Yadav P, Khurana R, Kumar M, Yadav R, Jangir BL, Rani M	<i>Bacillus cereus</i> strain pk3 16S ribosomal RNA gene, partial sequence	PP732272.1
23.	Yadav P, Khurana R, Kumar M, Yadav R, Jangir BL, Rani M	<i>Bacillus cereus</i> strain pk2 16S ribosomal RNA gene, partial sequence	PP732271.1
24.	Yadav P, Khurana R, Kumar M, Yadav R, Jangir BL, Rani M	<i>Bacillus cereus</i> strain pk1 16S ribosomal RNA gene, partial sequence	PP732270.1
25.	Yadav P, Khurana R, Kumar M, Yadav R, Jangir BL, Rani M	<i>Bacillus cereus</i> strain pk1 16S ribosomal RNA gene, partial sequence	PP732268.1
26.	Moudgil P, Nehra AK, Moudgil AD	Genotypic characterization of <i>Echinococcus granulosus</i> sensu lato isolates from slaughtered small ruminants	LC822725, LC822726 LC822727, LC822526 LC822527, LC822528 LC822529, LC820398 LC819658, LC819659 LC819660, LC819661 LC819662, LC819663 LC819664, LC823145 LC823146, LC823147
27.	Moudgil P, Moudgil AD	Genotypic characterization of <i>Echinococcus granulosus</i> sensu lato isolates from slaughtered small ruminants	LC823237, LC823238 LC823148, LC822839
28.	Moudgil P, Gupta R, Kumar R	16S rRNA based Metagenomic analysis of <i>Pasteurella multocida</i>	LC822530
29.	Moudgil P, Gupta R, Kumar R	Molecular characterization of <i>Anaplasma ovis</i> from goats	LC823720
30.	Singh P, Kumar P, Lather A, Gupta AK, Kumar P, Dahiya S, Kumar P, Sangwan P, Yadav V	Bovine viral diarrhea virus 3 isolate LUVAS/ BVD?2024 envelope protein 2 gene, partial cds	PP541776.1
31.	Singh P, Kumar P, Lather A, Gupta AK, Kumar P, Dahiya S, Yadav V, Mehtani R, Kumar R, Kumar P, Jangra P, Chabba R	Bovine Viral Diarrhoea virus 3 isolate LUVAS/BVD/2024 5'UTR	PP541775.1
32.	Moudgil AD, Nehra AK, Moudgil P	<i>Taenia asiatica</i> Chandigarh isolate mitochondrial ND1 gene for NADH dehydrogenase subunit 1, partial CDS	LC819656
33.	Moudgil AD, Nehra AK, Moudgil P	<i>Taenia asiatica</i> Chandigarh isolate mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC819657
34.	Moudgil AD, Nehra AK, Moudgil P	<i>Echinococcus ortleppi</i> Chandigarh 1 mitochondrial gene for NADH dehydrogenase subunit 1, partial CDS	LC789196





S. No.	Name of Authors	Title of sequence submitted	Admission No.
35.	Moudgil AD, Nehra AK, Moudgil P	<i>Echinococcus ortleppi</i> Chandigarh 2 mitochondrial gene for NADH dehydrogenase subunit 1, partial CDS	LC789197
36.	Moudgil AD, Moudgil P	<i>Toxocara canis</i> mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779162
37.	Moudgil AD, Moudgil P	<i>Toxascaris leonina</i> mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779163
38.	Moudgil AD, Nehra AK	<i>Rhipicephalus microplus</i> Kaithal mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779830
39.	Moudgil AD, Nehra AK	<i>Rhipicephalus microplus</i> Kurukshetra mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779831
40.	Moudgil AD, Nehra AK	<i>Rhipicephalus microplus</i> Ambala mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779832
41.	Moudgil AD, Nehra AK	<i>Hyalomma anatolicum</i> Fatehabad mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779158
42.	Moudgil AD, Nehra AK	<i>Hyalomma anatolicum</i> Bhiwani1 mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779159
43.	Moudgil AD, Nehra AK	<i>Hyalomma anatolicum</i> Bhiwani2 mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779160
44.	Moudgil AD, Nehra AK	<i>Hyalomma anatolicum</i> Charkhi Dadri mitochondrial COX1 gene for cytochrome c oxidase subunit 1, partial CDS	LC779161
45.	Panghal R, Kumar P, Mehtani R, Minhas S, Sheoran D, Kumar P, Gupta AK, Jindal N, Chhabra R	Mamastrovirus 3 isolate PAstV/LUVAS	PP731846, PP731847 PP731848, PP731849 PP731850, PP731851
46.	Mehtani R, Kumar P, Panghal R, Minhas S, Lather A, Kumar P, Gupta AK, Singh P, Kumar R, Yadav R, Sheoran D, Chhabra R	Bovine astrovirus isolate LUVAS/2024/	PP707737, PP707738 PP707739, PP707740 PP707741, PP707742
47.	Mehtani R, Kumar P, Panghal R, Minhas S, Lather A, Gupta AK, Kumar P, Singh P, Kumar R, Yadav R, Sheoran D, Chhabra R	Bovine astrovirus isolate BoAstV/LUVAS /2024/ORF2	PP707743, PP707744
48.	Singh P, Kumar P, Lather A, Gupta AK, Dahiya S, Yadav V, Mehtani R, Kumar R, Kumar P, Jangra P, Chhabra R	Bovine viral diarrhea virus 3 isolate LUVAS1 /BVD/2024 5' UTR	PP541775





S. No.	Name of Authors	Title of sequence submitted	Admission No.
49.	Singh P, Kumar P, Lather A, Gupta AK, Dahiya S, Yadav V, Mehtani R, Kumar R, Kumar P, Jangra P, Chhabra R	Bovine viral diarrhea virus 3 isolate LUVAS1 /BVD/2024 envelope	PP541776
50.	Maharana BR, Malik R, Ganguly A	<i>Theileria orientalis</i>	PP760428, PP760429 PP760430, PP760431 PP760432, PP760433 PP760434, PP760435 PP760436, PP760437 PP760438, PP760439 PP760440, PP763580 PP763581, PP680787 PP680788, PP680789 PP680790, PP680791 PP680792, PP680793 PP701004, PP701005 PP701006, PP701007 PP701008, PP701009 PP701010
51.	Maharana BR, Malik R, Ganguly A	<i>Theileria equi</i>	OR731828, OR731829 OR731830, OR731831 OR731832, OR731833 OR651254, OR687254 OR685656, OR650830 OR650834

#### PATENTS SUBMITTED/AWARDED TO FACULTY

S. No.	Name of Authors	Details of Patent(s)	Other Details
1.	Dr. K. Grakh Dr. V.G. Joshi Dr. V.J. Jadhav Dr. N. Jindal	Identification of <i>Salmonella typhimurium</i> binding novel peptides and their application as peptide aptamer-based detection method for <i>Salmonella typhimurium</i>	The filing process is initiated
2.	Dr Rajesh Kumar- As Team member	Developed low-cost aptamer-based assay for <i>Pasteurella multocida</i> detection	Applied & Published 202411018924
3.	Dr Rajesh Kumar- As Team member	Urine-based pregnancy detection method for ruminant livestock animals	Patent commercialized
4.	Dr. Sushila Maan Dr. Monika Punia Dr. Kanisht Batra Dr. Vinay Ganeshrao Joshi Dr. Suresh Gahlawat	Reverse Transcription Recombinase Polymerase amplification (RT-RPA) Assay for quick identification of Bovine Coronavirus in livestock	App no: 202211049464 A
5.	Dr. Sushila Maan Dr. Monika Punia Dr. Narender Maan	Reverse Transcription Recombinase Polymerase amplification (RT-RPA) assay for rapid detection of Bluetongue virus	202211049465 A





S. No.	Name of Authors	Details of Patent(s)	Other Details
	Dr. Kanisht Batra Dr. Suresh Gahlawat		
6.	Dr. Sushila Maan Dr. Monika Punia Dr. Kanisht Batra Dr. Aman Kumar Dr. Suresh Gahlawat	Reverse Transcription Recombinase Polymerase amplification (RT-RPA) assay for accurate diagnosis of Bovine Rotavirus	202211049466 A
7.	Dr. Prasanna Pal Dr. Anjali Aggarwal Dr. Sachinandan De Dr. Rajib Deb Dr. Vinay G Joshi Dr. Avijit Haldar	Peptide sequences and epitope specific antibodies for detection of bovine anti-mullerian hormone (bamh)	202111038528
8.	Dr. Swati Dahiya Dr. Neelam Rani Dr. Naresh Kr. Kakker	LUVAS FMD E-Loss Calculator (Mobile App submitted for Copyright)	Copyright No.SW-18808/2024





## COLLABORATION WITH ACADEMIC INSTITUTIONS AND INDUSTRY

Sr. No.	MoU Agency/Institution	Date of Initial MoU/ Renewal of MOU	Remarks
1.	National Research Centre on Equines, Hisar	09.05.2014	Enforced at present but can be terminated by mutual notice
2.	Central Institute for Research on Buffaloes, Hisar	09.05.2014	Enforced at present but can be terminated by mutual notice
3.	Indian Veterinary Research Institute, Deemed University, Izatnagar	07.12.2019	For 5 Years
4.	The Pirbright Institute, Surrey, UK	27.08.2015	Enforced at present but can be terminated by mutual notice
5.	Defence Institute of High Altitude Research, Leh-Ladakh	14.09.2015	Enforced at present but can be terminated by mutual notice
6.	Ayurved, Limited, Ghaziabad	26.11.2021	Enforced at present but can be terminated by mutual notice
7.	Digital Depositories in NAD	18.12.2017 (31.12.2019)	Enforced at present but can be terminated by mutual notice
8.	National Bank for Agriculture and Rural Development	26.07.2022	Enforced at present but can be terminated by mutual notice
9.	Unnat Bharat Abhiyan	15.03.2018	Enforced at present but can be terminated by mutual notice
10.	ICAR Umbrella MoU	12.03.2018	Enforced at present but can be terminated by mutual notice
11.	Ch. Baghmal Sewa Samiti, Jind	26.11.2021	Enforced at present but can be terminated by mutual notice
12.	Ayurved Research Foundation, Sonepat	26.11.2021	Enforced at present but can be terminated by mutual notice
13.	Chaudhary Charan Singh Haryana Agricultural University	10.06.2018	For 10 Years
14.	Chaudhary Devi Lal University, Sirsa	14.08.2018	For 5 Years
15.	National Institute of Food Technology Entrepreneurship and Management (NIFTEM), Sonepat	13.06.2019	For 5 Years
16.	Chaudhary Charan Singh National Institute of Animal Health (CCSNAIH), Baghpat	09.08.2019	Enforced at present but can be terminated by mutual notice
17.	DNA Xperts Private Limited, Noida, U.P.	30.11.2019	For 5 Years
18.	Government Industrial Training Institute, Hisar	20.03.2020	Enforced at present but can be terminated by mutual notice
19.	Inflibnet Centre, Gandhinagar, Gujarat	23.12.2020	Enforced at present but can be terminated by mutual notice





Sr. No.	MoU Agency/Institution	Date of Initial MoU/ Renewal of MOU	Remarks
20.	Kurukshetra University	16.06.2021	For 5 Years
21.	IITR Roorkee	01.07.2021	For 5 Years
22.	CSBF, Hisar	07.07.2021	Enforced at present but can be terminated by mutual notice
23.	Punjab Engineering College, Chandigarh	22.10.2021	Enforced at present but can be terminated by mutual notice
24.	National Centre for Disease Control, Delhi	12.01.2023	Enforced at present but can be terminated by mutual notice
25.	Punjab National Bank Farmer Taining Centre, Sacha Khera, Jind	20.02.2023	For 5 Years
26.	CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thrivananthapuram, Kerala	14.03.2023	For 5 Years
27.	Brooke Hospital for Animals, Delhi	22.11.2023	Enforced at present but can be terminated by mutual notice
28.	Guru Angad Dev Veterinary & Animal Sciences University (GADVASU), Ludhiana	05.08.2023	For 5 Years
29.	Indovax Private Limited, 56 Nehru Place, New Delhi	14.12.2023	For 5 Years
30.	CellMed Biotech Private Limited, Khanpur, New Delhi	19.12.2023	For 5 Years
31.	ICAR-Central Institute for Research on Goats, Makhdoom, Mathura (UP)	08.02.2024	Enforced at present but can be terminated by mutual notice
32.	Dayanand (DN) College, Hisar	06.02.2024	For 3 Years
33.	Haryana Pashudhan Uthan Mission (HPUM)	04.03.2024	For 3 Years
34.	Agriculture Skill Council of India (ASCI)	12.03.2024	For 6 Years
35.	Guru Jambheshwar University of Science and Technology, Hisar	25.04.2024	For 5 Years
36.	ICAR, New Delhi and Heartfulness Education HET's Heartful Campus, Kanha Village, Ranga Reddy District, Telangana	01.10.2022	For 5 Years
37.	Multi-Institutional Memorandum of Understanding	24.08.2023	For 10 Years
38.	HTA, Haryana & VOICE Society, Delhi	30.04.2024	For organizing workshop
39.	Orthotech India Pvt. Ltd., Gujarat	21.06.2024	For 5 Years



## IMPORTANT EVENTS, EMINENT VISITORS AND ACHIEVEMENTS

### IMPORTANT EVENTS

#### Participation in 47<sup>th</sup> Tanzania International Trade Fair

Under the guidance of Haryana's honorable Chief Minister, Shri Manohar Lal Ji, a delegation from Haryana visited Tanzania to participate in the 47<sup>th</sup> Tanzania International Trade Fair, held from July 6 to July 12. The delegation included over 50 participants, comprising senior officials of the Haryana government, businessmen, and Vice-chancellors and officials from four universities. The primary objective of this visit was to explore business and educational opportunities in Tanzania. Among the key members of the delegation were the Vice-Chancellor of LUVAS, Prof. (Dr.) Vinod Kumar Verma, and the Director of Research, Dr. Naresh Jindal. On July 7, India's External Affairs Minister, Shri S. Jaishankar, met with the delegation. During the meeting, he expressed his optimism that this visit would pave the way for new avenues of trade and cooperation between the two countries in the future. On July 9, Shri Binay Shrikant Pradhan, the Indian High Commissioner to Tanzania, along with Shri Raja Shekhar Vundru, Additional Chief Secretary, Department of Foreign Cooperation, Haryana; Shri A.K. Meena, Director General and Secretary, Department of Foreign Cooperation, Haryana; Shri Pawan Chaudhary, Advisor, Department of Foreign Cooperation, Haryana; the Director General of Tanzania Trade Development Authority, and other members of the delegation, attended the inauguration of the Haryana Pavilion in Dar es Salaam, Tanzania. During this event, the information brochure of LUVAS (Lala Lajpat Rai University of Veterinary and Animal Sciences) was also released. The brochure provided concise information about the university's activities in the fields of veterinary science, animal science, and dairy technology. On this occasion, Shri Binay Shrikant Pradhan highlighted the vast opportunities available in Tanzania in the fields of trade and education. He also pointed out that Haryana was the first state from India to send a delegation to Tanzania. At the event, the Vice-Chancellor of LUVAS, Prof. (Dr.) Vinod Kumar Verma, expressed that LUVAS University was eager



to collaborate with Tanzania in veterinary science, animal science, and dairy technology. The visit aimed to explore opportunities for mutual cooperation in education and science, enabling Indian and Tanzanian veterinarians and students to work together for progress in these fields.

#### One-Day Seminar on Entrepreneurship for Postgraduate Students at LUVAS

Under the guidance of Prof. (Dr.) Vinod Kumar Verma, the Vice-Chancellor of Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), the Directorate of Human Resources and Management organized a one-day seminar on entrepreneurship for the university's postgraduate students. The main objective of the seminar was to enhance students' understanding of entrepreneurship and foster their interest in it. Dr. S.S. Dhaka, Director of Human Resources and Management, explained that in November





2022, LUVAS had established the Institution Innovation Council. The role of this council is to systematically promote a culture of innovation and the startup ecosystem within the university. The council has been actively organizing various innovation and entrepreneurship activities and plans to host future programs involving students, faculty, and staff. These programs will focus on discussions, problem-solving, concept development, and project management, with the aim of nurturing entrepreneurial skills. The seminar included two technical sessions, which were chaired by Dr. Gulshan Narang, the Dean of the College of Veterinary Science. Dr. Narang emphasized that students should not solely focus on government jobs, as there are vast opportunities in private multinational companies and self-employment in today's world. The first session of the seminar was titled "Entrepreneurship and the Leading Role of Veterinarians in the Private Sector," while the second session was on "Dairy Entrepreneurship: A Success Story." In the first session, Dr. Saurabh Shekhar, Managing Director of Nutreco Company, Hyderabad, spoke to the students about the qualities that a successful entrepreneur must possess. He also discussed the challenges in setting up a self-employment venture and how to overcome them. In the second session, Dr. Umesh Batra, Managing Director & CEO of Nutritious Milk Products Pvt. Ltd., shared successful stories of dairy entrepreneurship and motivated students to pursue entrepreneurship. He provided valuable information to help students establish their own ventures in the dairy industry. More than 130 students participated in the seminar. The event was organized by Dr. Rachna, Assistant Professor at LUVAS, and Dr. Swati Dahiya, Research Coordinator.

### MOU Signed Between LUVAS and Guru Angad Dev Veterinary and Animal Sciences University

LUVAS signed an MOU with Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana, to promote mutual research activities. The MOU was signed at



an event organized by the Human Resource Management Directorate at LUVAS. Dr. Surendra Singh Dhaka, Director of Human Resources and Management and Registrar at LUVAS, and Dr. Yashpal Singh Malik, Dean of the College of Animal Biotechnology at GADVASU, signed the agreement. Dr. Naresh Jindal, Director of Research at LUVAS, and Dr. Gulshan Narang, Dean of the College of Veterinary Science at LUVAS, were present as witnesses during the signing ceremony.

Following this agreement, postgraduate students and researchers from both LUVAS and GADVASU will be able to freely utilize the latest scientific equipment and research information available at each other's institutions. This collaboration aims to enhance research and academic exchanges between the two universities.

### Visit of Sokoin Agricultural University Delegation to LUVAS



A delegation from Sokoin Agricultural University (SUA), Tanzania, visited LUVAS as part of ongoing efforts to enhance cooperation in veterinary and animal husbandry sectors through research and academic collaboration at national and international levels. This visit aimed to further strengthen ties and explore opportunities for mutual development between the two universities. The SUA delegation included Prof. Amandas Muhairwa, Deputy Vice Chancellor for Planning, Finance, and Administration; Prof. Boniface Mbilini, Dean, School of Engineering and Technology; Prof. Geoffrey Rugila, Principal, College of Natural and Applied Sciences; Dr. Charles Limo, Senior Lecturer, Department of Animal, Aquatic Agriculture, and Range Science; and Mr. Peter Mwakiluma, Director of Human Resources and Administration. Upon their arrival at LUVAS, they were warmly welcomed by Dr. Naresh Jindal, Director of Research, and Dr. Gulshan Narang, Dean of the College of Veterinary Science. A meeting was held in the Vice Chancellor's Secretariat committee room under the



chairmanship of Prof. (Dr.) Vinod Kumar Verma, Vice Chancellor of LUVAS, where the delegation engaged with senior officials of LUVAS. During the meeting, Dr. Verma highlighted the potential for collaboration between the two universities in various fields, stating that both universities could work together and learn from each other. He also extended an invitation for teachers and students from SUA to visit LUVAS for training programs. In the meeting, Prof. Amandas Muhairwa shared information about the various activities at SUA and expressed great interest in signing a Memorandum of Understanding (MoU) with LUVAS. He emphasized the potential for effective mutual cooperation between the two universities for the benefit of science and the welfare of animal farmers, and hoped that the collaboration would begin as soon as possible. Dr. Naresh Jindal provided a detailed overview of LUVAS's teaching, research, and extension activities. After the meeting, the SUA delegation visited various departments of the university. On the following day, the team also toured the ongoing construction of LUVAS's new campus and visited the university's IVF-ETT (In Vitro Fertilization and Embryo Transfer Technology) lab. This visit marked a significant step towards strengthening the academic and research cooperation between LUVAS and Sokoin Agricultural University.

### One-Day Seminar for VLDD students



A one-day seminar was organized by the Institute of Paraveterinary Science at Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, for the second-year VLDD (Veterinary Laboratory and Diagnostic Diploma) students. The seminar focused on student-industry interaction and was held as part of LUVAS's ongoing efforts to provide students with exposure to new opportunities in the field of paraveterinary science. The event was organized under the guidance of LUVAS Vice Chancellor, Dr. Vinod Kumar Verma. Dr. S.P. Dahiya, the

Director of the Institute, provided an overview of the seminar and explained that LUVAS has consistently organized such events to make students aware of emerging opportunities in the paraveterinary field. Given the large participation and positive feedback from students, he assured that the university would continue to host such programs in the future. Dr. Dahiya also congratulated the paraveterinary team for successfully organizing the seminar. The seminar consisted of two sessions. In the first session, Mr. Saurav Pandey from Cross and Climb shared valuable insights with the students about job opportunities in meat processing in Germany and new employment prospects for paraveterinary professionals abroad. The second session featured Mr. Hilal from Keros Pharma, who informed the students about job opportunities in the private sector.

### National Foot-and-Mouth Disease Awareness Week: Awareness Campaign for Farmers, Veterinarians, Students, Paravets, and Scientists



Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) celebrated the "National Foot-and-Mouth Disease (FMD) Awareness Week" from September 11 to 17, 2023, under the leadership of Vice Chancellor Dr. Vinod Kumar Verma. The event was organized by the Department of Animal Microbiology and the Regional Foot-and-Mouth Disease Research Centre at Hisar, with the support of the Haryana State Animal Husbandry Department. Various programs were held for farmers, veterinarians, students, paraveterinary staff, and scientists across different districts of Haryana. Dr. Naresh Jindal, Director of Research at LUVAS, informed the Vice Chancellor that the university is making every effort to control and prevent foot-and-mouth disease (FMD), and



these efforts have proven to be highly effective in the disease's control. Under the "Livestock Health and Disease Control Program" by the Department of Animal Husbandry and Dairying, Government of India, free vaccination for cows and buffaloes is being conducted to control the spread of FMD. As part of this program, an online session was held for scientists, veterinary officers, and in-charge personnel from all 32 centers across the country to discuss the latest vaccination techniques and progress in disease prevention. Dr. Swati Dahiya, the Chief Scientist at the Regional Foot-and-Mouth Disease Research Centre and Research Coordinator, explained that foot-and-mouth disease is a highly contagious viral infection affecting cattle, buffaloes, pigs, goats, and sheep. The disease spreads rapidly, leading to a significant decline in animal production, particularly milk yield. The virus spreads through the saliva and foam from the mouths of infected animals and can be transmitted through the air or by sticking to objects, spreading the disease over long distances and affecting animals in nearby villages. Through modern techniques available at LUVAS, including blood sample testing and continuous vaccination efforts with the cooperation of farmers, the control and eventual elimination of FMD is achievable. The awareness week played a crucial role in educating the stakeholders about the severity of the disease and the importance of vaccination and preventive measures to safeguard livestock.

### National Workshop-cum-Training" program by Department of Veterinary Pathology and Department of Veterinary Anatomy



Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar

organized a three days "National Workshop-cum-Training" program from 26-28 September, 2023 under the guidance of Worthy Vice-Chancellor, Prof. (Dr.) Vinod Kumar Verma. This workshop-cum-training was being organized for LUVAS faculty, Field/Private Veterinarians and Post-Graduate Students. Entitled "Fundamentals of Anatomic Pathology and Post-Mortem Examination of Domestic Animals and Poultry". Dr. Vikas Nehra, Head of the Department of Veterinary Pathology, LUVAS was the Course Director of this Workshop-cum-Training and in his inaugural welcome address to the gathering, he told about the importance of the programme being organized and gave an overview of the Workshop-cum-training. He told that this is the first workshop-cum-training programme which is organized by Department of Veterinary Pathology in collaboration with Department of Veterinary Anatomy, LUVAS, Hisar and the same will be organized in the future too.

### A Rabies Awareness Program: Free Anti-Rabies Vaccination Camp Organized



Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, in collaboration with the Department of Animal Husbandry and Dairying, organized a series of awareness programs to commemorate World Rabies Day on September 28. As part of these activities, a free anti-rabies vaccination camp was held at the Animal Hospital in Narnaul. The camp was inaugurated by Dr. Mangal, the City Magistrate of Narnaul. LUVAS, under the leadership of Vice Chancellor Prof. (Dr.) Vinod Kumar Verma, and under the direction of Director Dr. Virendra Panwar, with the support of scientists Dr. Devendra Yadav and Dr. Jyoti Shunthwal, organized this initiative. The event included a series of programs aimed at raising awareness

about rabies prevention. Along with the free vaccination program, various rabies awareness campaigns were conducted, including sessions for school children under the age of 15 in Narnaul. These programs focused on educating children about the rabies epidemic and clearing misconceptions surrounding the disease. Dr. Mangal, while inaugurating the free anti-rabies vaccination camp, emphasized the importance of rabies awareness, noting that as a veterinarian, he understands the gravity of the issue. He highlighted how zoonotic diseases, such as rabies, are a global concern, with rabies being a life-threatening disease posing a significant threat to society.

#### Free Rabies Vaccination and Animal Disease Checkup Camp Organized on World Rabies Day



On the occasion of World Rabies Day, LUVAS, Hisar, organized a Free Rabies Vaccination Camp and Animal Disease Checkup Camp on September 28, 2023. The camp was organized by the Department of VCC. The camp was inaugurated by the Chief Guest, Vice Chancellor of LUVAS, Prof. (Dr.) Vinod Kumar Verma. On this occasion, the Vice Chancellor emphasized the importance of World Rabies Day, which is observed annually on September 28. He stated that this day serves as a global initiative to raise awareness about rabies. Rabies is a deadly zoonotic disease, and widespread programs are needed to prevent it in order to reduce the annual mortality rate caused by this disease. The free rabies vaccination camp witnessed enthusiastic participation from animal lovers. Over 100 pet and stray dogs and cats were vaccinated during the camp. The event was attended by several distinguished guests, including LUVAS Registrar Dr. S. S. Dhaka, Dean of the College of Veterinary Science Dr. Gulshan Narang, Director of Student Welfare Dr. Pawan Kumar, Dean of Post Graduate Studies Dr. Manoj Roze, Director of Human Resource and

Management Dr. Rajesh Khurana, Director of IPVS Dr. Satpal Dahiya, Head of TVCC Dr. Gyan Singh, as well as various faculty members, scientists, and students. This initiative contributed significantly to raising awareness about rabies and promoting vaccination, ensuring the health and safety of both animals and humans in the region.

#### Visit of Shri Shravan Kumar Garg, Chairman of Haryana Gau Seva Commission, to LUVAS' New Campus



On September 22, 2023, Shri Shravan Kumar Garg, the honorable Chairman of the Haryana Gau Seva Commission, visited the University. He was accompanied by officials of the Commission and was warmly welcomed by the Vice Chancellor of LUVAS, Dr. Vinod Kumar Verma. The meeting was attended by Dr. Gulshan Narang, Dean of the College of Veterinary Science, Dr. Sajjan Sihaag, Dean of the College of Dairy Science, officials Heera Lal Ji and Ashwani Mittal Ji from the Commission, Dr. Subhash Jangra, Deputy Director of the Animal Husbandry Department, Hisar, and Mr. Hansraj Beniwal, Manager of Balsamand Gaushala. During the meeting, the participants had an in-depth discussion on the prevention and control of diseases in gaushalas, as well as animal feed and management activities. Dr. Verma, the Vice Chancellor of LUVAS, presented the ongoing project on embryo transfer technology and *in-vitro* fertilization. He expressed his gratitude to the Haryana Gau Seva Commission for their contributions to the project and hoped for continued support from the Commission. The meeting included detailed discussions regarding the implementation of the project. After the meeting, Shri Shravan Kumar Garg took the opportunity to inquire about the management of the animal farm at university and expressed his appreciation for the farm's operations. Following this, he visited the newly established Embryo Transfer Technology Laboratory in the new campus and was pleased with the performance of the project. He expressed confidence that this project would



serve as a milestone in breed conservation and increasing farmers' income.

### Dr. Anika Malik of LUVAS Awarded at National Conference



Dr. Anika Malik, Assistant Professor at LUVAS, Hisar, was awarded the Best Oral Presentation Award at the 5th National Conference organized by the Society for Veterinary and Animal Husbandry Extension. The conference, held over three days, focused on the topic "Smart Animal Husbandry Techniques to Increase Farmers' Income." Dr. Malik was recognized for her research paper titled "Economic Sustainability of Livestock Production Systems in Haryana: An Assessment," which she presented at the conference. Her contribution was highly appreciated for its impact on the field of veterinary and animal husbandry extension. The award ceremony was attended by LUVAS Vice Chancellor, Prof. (Dr.) Vinod Kumar Verma, Dean of the College of Veterinary Science, Dr. Gulshan Narang, Research Director Dr. Naresh Jindal, and Department Head Dr. Gautam, all of whom congratulated Dr. Malik on her achievement. The conference was hosted by Khalsa Veterinary College in Amritsar, Punjab.

### One-Day Seminar Organized by the Institutional Innovation Council at LUVAS

In line with the directives of the Vice Chancellor, Prof. (Dr.) Vinod Kumar Verma, Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, organized a one-day seminar to commemorate the 'National Entrepreneurship Day' and 'World Science Day'. The seminar aimed at raising awareness among faculty members and students about the complete process of vaccine development, patents, and



entrepreneurship. Dr. Naresh Jindal, Director of Research, was the chief guest at the event. During his address, he encouraged the faculty and postgraduate students to engage in high-quality research, emphasizing that research should be focused on benefiting animals and farmers. Dr. Rajesh Khurana, Director of Human Resource Management, spoke about the seminar's organization by LUVAS' Institutional Innovation Council. Dr. Naveen, Principal Scientist and Head of the VTC, National Research Centre on Equines (NRCE), Hisar, detailed the vaccine production process for Lumpy Skin Disease and its prevention. Dr. Naveen elaborated on various questions related to this topic, particularly the critical role of NRCE in developing the vaccine and comparing it to other similar vaccines. The second speaker, Dr. Bharti, a patent attorney, and founder of Swash Legal Consultants, discussed the importance of entrepreneurship. She stressed that students should be encouraged through training and financial support for research entrepreneurship. Dr. Bharti further highlighted the risks of underestimating scientific innovations and technologies, which could harm future opportunities. The seminar also featured a technical session chaired by Dr. Naresh Kakkar, with coordination by Dr. Vishal Sharma, Dr. Shalini Sharma, and Dr. Rachna. Various department heads, scientists, faculty, and students from different departments were present at the seminar.

### 14<sup>th</sup> Foundation day of LUVAS

University celebrated its 14<sup>th</sup> Foundation day on 1<sup>st</sup> December 2023. Function was organized on the theme



'Unleashing Wisdom: celebrating thirteen years of progress and honoring the former officers of university'. Various academic excellence awards were distributed to undergraduate students. On this occasion, former Vice Chancellor of LUVAS, Major General Dr. Shrikant Sharma SM, VSM was the Chief Guest, Former Vice-chancellor Dr. Gurdial Singh and Dr. Satendra Singh Arya, CEO, Agricultural Skill Council of India, Government of India were present as special guests. Chief Guest, Major General Dr. Shrikant Sharma shared his experience about the glorious history of 75 years of College of Veterinary Science, LUVAS and further told the students that to be successful in life, it is important to dream and hard work is very important to make the dreams come true. During this program, the students were honored by the chief guest in the competitions organized on the occasion of Foundation Day. Along with this, former officials of LUVAS were also honored on this occasion. A cultural program was also organized on this occasion which the guests present thoroughly enjoyed.

#### Two days International symposium on One Health

Two days International symposium on "Promotion of one Health: opportunities, challenges and solutions" & 19th Annual Conference of Indian Association of Veterinary



Public Health Specialists was organized in LUVAS, Hisar. More than 200 delegates across the globe has gathered in LUVAS for the event.

#### LUVAS Signs Memorandum of Understanding (MoU) with Indovax Private Limited for Research Collaboration



Under the leadership of Vice Chancellor Prof. (Dr.) Vinod Kumar Verma, LUVAS, Hisar, signed a MoU with Indovax Private Limited, Hisar, to promote research activities. The MoU signing ceremony took place at the Vice Chancellor's Secretariat. Dr. Rajesh Khurana, Director of Human Resource Management, welcomed the Vice Chancellor and the team from Indovax Private Limited during the ceremony. The MoU was signed on behalf of LUVAS by Dr. Naresh Jindal, Director of Research, and on behalf of Indovax Private Limited by Mr. Arun Tiwari, Resident Director. The signing ceremony was also attended by the Dean of Postgraduate Studies and the Director of Human Resource Management, as well as the Heads of R&D and S&T departments from Indovax Private Limited, all of whom signed the MoU. In his address, Vice Chancellor Prof. (Dr.) Vinod Kumar Verma explained that this MoU was established to foster mutual cooperation between the two institutions in the fields of poultry health protection and research and development of new products and technologies to guide students and farmers. According to the agreement, the intellectual property, research publications, and benefits arising from the commercialization of technologies developed through the cooperation between the two institutions will be jointly owned by LUVAS, Hisar, and Indovax Private Limited, Sishwala, Hisar.





## LUVAS Faculty and Scientists Awarded at National Veterinary Parasitology Congress



Under the aegis of the Indian Association for the Advancement of Veterinary Science, the Department of Veterinary Parasitology at Bihar Veterinary College, Patna, organized a three-day XXXII National Veterinary Parasitology Congress and National Symposium on the topic "Sustainable Control of Parasitic Diseases for Improving Livestock Productivity in the Present Scenario." Over 300 delegates from across the country attended the event. Dr. B.R. Maharana and Dr. Anil Kumar Nehra from LUVAS participated in the conference, where scientists presented their lectures on various topics and shared their thoughts on sustainable approaches for controlling livestock parasites. Dr. Maharana and Dr. Nehra were awarded first and second prizes in various sessions. Additionally, LUVAS PhD student Dr. Pradeep Kumar was honored with the "Smt. Saraswati Anandan Award" for his thesis titled "Epidemiology, Molecular Identification, and Resistance Profile of Gastrointestinal Nematodes in Horses of Haryana" as the Best PhD Thesis.

## LUVAS Faculty Members Awarded at National Veterinary Biochemistry and Biotech (SVBBI) Conference



The 7th Annual Conference of the Society for Veterinary Biochemistry and Biotech (SVBBI) and the International Symposium on "Multi-Omics: Challenges and Opportunities in Veterinary Research," organized by the Department of Veterinary Biochemistry at ICAR-Indian Veterinary Research Institute (IVRI), Izatnagar, Bareilly, hosted a significant academic gathering. Faculty members from the Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Dr. Shalini Sharma and Dr. Surbhi, participated in the symposium and presented their research in various oral sessions. Dr. Shalini Sharma gave a special talk on FASC in animal disease diagnosis, which was well received by the attendees. Dr. Surbhi was awarded for her research on "Role of Enzymes in Resistance to Deltamethrin and Coumaphos in Hyalomma anatolicum Ticks Collected from Haryana". Dr. Surbhi also participated as a presenter in an oral technical session, where she discussed enhancing animal health through new-generation vaccines and diagnostics.

## Visit of Animal Husbandry Commissioner, Ministry of Fisheries, Animal Husbandry and Dairying, GOI



Dr. Abhijit Mitra, Animal Husbandry Commissioner, Ministry of Fisheries, Animal Husbandry and Dairying, GOI and Dr. Raghavendra Bhatta, Deputy Director General (Animal Science), ICAR visited LUVAS on 02.02.2024. They were welcomed by the Worthy Vice-Chancellor, Prof. (Dr.) Vinod Kumar Verma and officers of the University. Both the dignitaries were apprised about the teaching, research and extension activities of the University and discussed various issues. Dr. S.S. Dhaka, Registrar, Dr. Gulshan Narang, Dean COVS, Dr. Naresh Jindal, Director of Research, Dr. Manoj Rose Dean PGS, Dr. Virender Panwar, Director of Extension Education, Dr. S. P. Dahiya, Director, IPVS, Dr. Pawan Kumar, Director of Student's Welfare and

Dr. Rajesh Khurana, Director of Human Resource Management, Dr. Sajjan Singh, Dean, College of Dairy Sciences, Sh. Surender, Comptroller and Dr. Ankit Magotra, Scientist, AGB were present in the meeting.

### Celebration of International Women's Day



Lala Lajpat Rai University of Veterinary and Animal Sciences celebrated "International Women's Day 2024" on March 07. Mrs. Geeta Bharti, IAS, Honourable Commissioner (Hisar Division) graced the occasion as Chief Guest. Dr. Sonia Sindhu Chairperson of Women cell, LUVAS welcomed all the guests. Dr. Sunita Rani, Professor Haryana school of Business, Guru Jambeshwar University of Science and Technology was Guest of Honour. She delivered a lecture on the topic "I am remarkable" and interacted with the participants to strive to empower women to celebrate their achievements in the workplace and beyond. Honourable Commissioner, Hisar Division, Mrs. Geeta Bharti, IAS, Chief Guest, highlighted the importance of women in society and the role played by them in different spheres. She deliberated on "Inspire Inclusion" the theme of International Women's Day 2024. It emphasizes the importance of creating an inclusive society and investing in women & empowerment. All the teaching faculty and non-teaching female staff member along with students of LUVAS, attended the seminar.

### Lifetime Achievement Award Presented to LUVAS Vice Chancellor Prof. (Dr.) Vinod Kumar Verma

At the 24th Indian Veterinary Congress and the 31st Annual National Conference of the I.A.A.V.R., held at Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar, Prof. (Dr.) Vinod Kumar Verma, Vice Chancellor of



LUVAS, was honored with the prestigious Lifetime Achievement Award. This award was presented to him in the esteemed presence of the Chief Guest, Dr. R.C. Aggarwal, Deputy Director-General of ICAR (Education), and the distinguished Guest of Honor, Dr. Manoj Naisari, Advisor to the Ministry of AYUSH, Government of India. Dr. Rishendra Verma, the Founder Secretary of I.A.A.V.R., shared that Prof. (Dr.) Vinod Kumar Verma was awarded for his exceptional contributions to the fields of veterinary education, research, technology development, and outreach. His work has been widely recognized, and the award serves as a testament to his outstanding achievements in the veterinary science community.

### Inauguration of the Three-Day Workshop on Animal Parasitology at LUVAS



A three-day national training workshop focused on external animal parasites was organized by the Department of Animal Parasitology at LUVAS and marked the commencement of a series of national-level training programs being conducted at the university. The event was inaugurated by the Chief Guest, Dr. Tarun Kumar Bhattacharya, Director, National Research Centre on Equines. Dr. Bhattacharya highlighted the harmful effects of animal parasites in his address, describing them as a major obstacle in establishing a successful animal husbandry business. He encouraged the participants to use modern



techniques to prevent parasitic infestations and advised them to remain vigilant, learn all the techniques taught during the workshop, and implement them in their respective fields. During the inauguration, the Chief Guest also launched the training manual for the workshop. Dr. Pawan Kumar, Director of Student Welfare, LUVAS emphasized the importance of animal parasitology and congratulated the Department of Animal Parasitology for taking the initiative to organize the training workshop. Dr. Sukhdeep Vohra, Head of the Department of Animal Parasitology and Director of the Workshop, provided the details about the training program and informed that a total of 19 participants from various universities are attending the three-day national training workshop.

## Inauguration of the Advanced Milk and Dairy Products Processing Training Program at LUVAS



At Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), the training program on "Advanced Milk and Dairy Products Processing" under the Scheduled Caste Sub-Plan for farmers was inaugurated by Vice Chancellor, Dr. Vinod Kumar Verma. The program was organized by the CoDST at LUVAS. The event marked an important step in

enhancing the dairy sector's capabilities by equipping farmers with advanced skills and knowledge to improve milk and dairy product processing.

## One-Day Workshop on "Latest Approaches and Experiences in Livestock Development" at LUVAS



Under the guidance of Vice Chancellor Prof. (Dr.) Vinod Kumar Verma LUVAS, Hisar, organized a one-day workshop on "Latest Approaches and Experiences in Livestock Development" through the Department of Veterinary and Animal Husbandry Extension Education. The inauguration ceremony was attended by Dr. Rajesh Khurana, Director of Human Resources and Management, as the Chief Guest. Dr. Gautam, Head of the Department of Veterinary and Animal Husbandry Extension Education, provided an overview of the workshop, mentioning that a total of 13 participants attended. The workshop was designed to discuss emerging production complexities and issues, focusing on streamlining extension approaches in light of changing dynamics. Experts and participants engaged in discussions on various topics, including livestock development programs, sustainability of production systems, gender issues, changing livelihoods perspectives, and agricultural extension as a pathway.

# EXPANSION OF ACADEMIC SECTIONS OF UNIVERSITY

## INAUGURATION OF ADMINISTRATIVE BLOCK AND ETT-IVF LABORATORY AT LUVAS

The Administrative Block and ETT Laboratory at the new campus of Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) were inaugurated by Hon'ble Chief Minister of Haryana, Sh. Manohar Lal, in the esteemed presence of Sh. Jai Prakash Dalal, Hon'ble Minister of Animal Husbandry and Dairying, Haryana; Dr. Kamal Gupta, Hon'ble Minister of Urban Local Bodies and Housing, Haryana; Mr. Brijendra Singh, Hon'ble Member of Parliament, Hisar; Prof. (Dr.) Vinod Kumar Verma, Vice Chancellor, LUVAS; and Mr. Jogi Ram Sihag, MLA, Barwala.

Sh. Manohar Lal, Hon'ble Chief Minister emphasized that Haryana, as an agricultural state, greatly benefits from allied sectors such as animal husbandry, which play a crucial role in enhancing farmers' incomes. He congratulated the faculty and staff of LUVAS on the inauguration of the Administrative Building and ETT-IVF Lab, highlighting that infrastructure development is essential for economic growth and stability. Sh. Jai Prakash Dalal also praised LUVAS for its efforts to conserve Sahiwal breed through ETT-IVF technology, describing it as a milestone in increasing farmers' income. He expressed confidence that the expansion of this technique would accelerate and bring significant advancements in the livestock sector. He also encouraged scientists and students of LUVAS to continue their contributions to the progress of Haryana, India, and the world.

Hon'ble Vice Chancellor Prof. (Dr.) Vinod Kumar Verma acknowledged the visionary leadership of the Chief Minister, which has been instrumental in driving research and development at LUVAS and also recognized the significant contributions of Hon'ble Minister Sh. J.P. Dalal in advancing the fields of agriculture, animal husbandry, and fisheries, attributing Haryana's all-round development in these sectors to his foresight and expertise. Dr. Verma outlined the phased development of the new LUVAS campus. He stated that Phase I includes the completion of the Administrative Building, inaugurated today, along with

the near-completion of the Dairy Science College. Phase II will focus on 19 new projects worth ₹ 638 crores, with work already underway on six of these projects. Dr. Verma reiterated that LUVAS remains committed to providing high-quality education and advancing research, enhancing support for livestock owners, exploring marketing strategies for livestock products and conserving indigenous livestock breeds.

The event was attended by officials from LUVAS, heads of various departments, faculty members, students, and dignitaries from different departments of the Haryana government, marking a significant milestone in the University's ongoing growth and development.





## Inaugural Function of Administrative Block on 24.01.2024

### ESTABLISHMENT OF OPHTHALMOLOGY UNIT

Ophthalmology unit has been established in the Department of Veterinary Surgery and Radiology at LUVAS, Hisar and is dedicated for the treatment of various eye conditions in domestic animals and livestock. Prof. Dr. Vinod Kumar Verma, Worthy Vice-Chancellor, Lala Lajpat Rai University of Veterinary and Animal Sciences inaugurated the Ophthalmology Unit on 1<sup>st</sup> December, 2023.

The unit is well-equipped with the latest ophthalmic instruments for the diagnosis and treatment of common animal eye ailments, including cataract surgery. The establishment of this unit marks a significant milestone, as advanced cataract surgery for animals, using the latest techniques- a first-of-its-kind in Haryana. This initiative will spare pet owners and livestock caretakers from traveling to metropolitan areas for eye care, allowing them to avail the latest diagnostic and medical facilities at LUVAS at nominal charges. Livestock owners and farmers will find it convenient to ensure eye care for their animals. The

department will also function as a nodal training center in the field of veterinary ophthalmology for various departments and veterinary officials.

### LAUNCH OF THE PIGGERY UNIT

Piggery Unit of Lala Lajpat Rai University of Veterinary and Animal Sciences was inaugurated by the Dr. Vinod Kumar Verma, Worthy Vice-Chancellor of the university on March 04, 2024. On this occasion, a three-day national workshop and training on "Scientific Pig Farming" was organized by the Department of Livestock Farm Complex. The objective of this unit is to train the youth of the state and motivate them to set up a business in pig farming. The scientists of the university will help the farmers and work on the economics of pig farming since pig farming is increasing all over the world and has always been profitable due to higher litter size of pigs and feed conversion ratio (FCR). Pig farming supports global nutrition and food security and also plays a significant economic role by generating income, creating employment, and supporting related industries



such as feed production and meat processing. Additionally, pigs contribute to sustainability by efficiently converting feed into meat, utilizing agricultural by-products, and providing manure for soil enrichment. Beyond agriculture, pigs are valuable in biomedical research due to their physiological similarities to humans, aiding in medical advancements.













# GLIMPSES OF LUVAS





# Lala Lajpat Rai University of Veterinary and Animal Sciences

Hisar-125 004 (Haryana)

Website: [www.luvias.edu.in](http://www.luvias.edu.in)

