

Summary of the event

In continuation of the ongoing lecture series, related to laboratory animals, two lectures for the faculty and PG students of UP University of Medical Sciences, Saifai were organised by the Department of Animal Husbandry under the supervision of Hon'ble Vice Chancellor, Prof. (Dr.) Prabhat Kumar Singh Sir on 6th September & 8th September 2023, in the Lecture Theatre at Academic block.

Dr. Amita Singh, Veterinary Officer, delivered the lectures on the topic “Health and Genetic monitoring of laboratory animals” Part-I & Part-II, respectively.

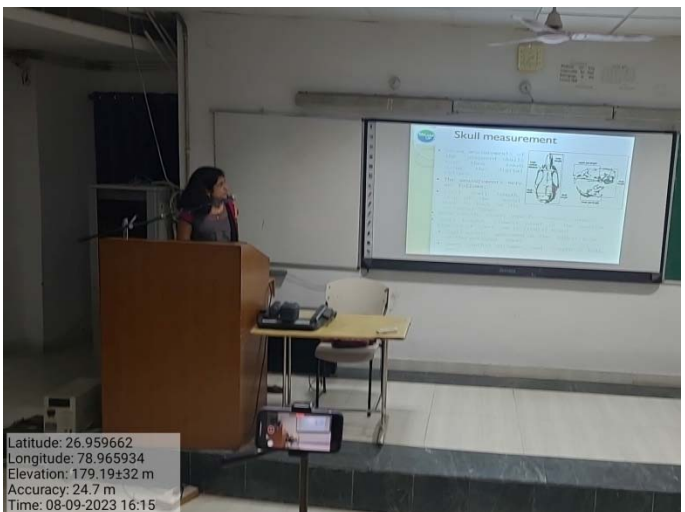
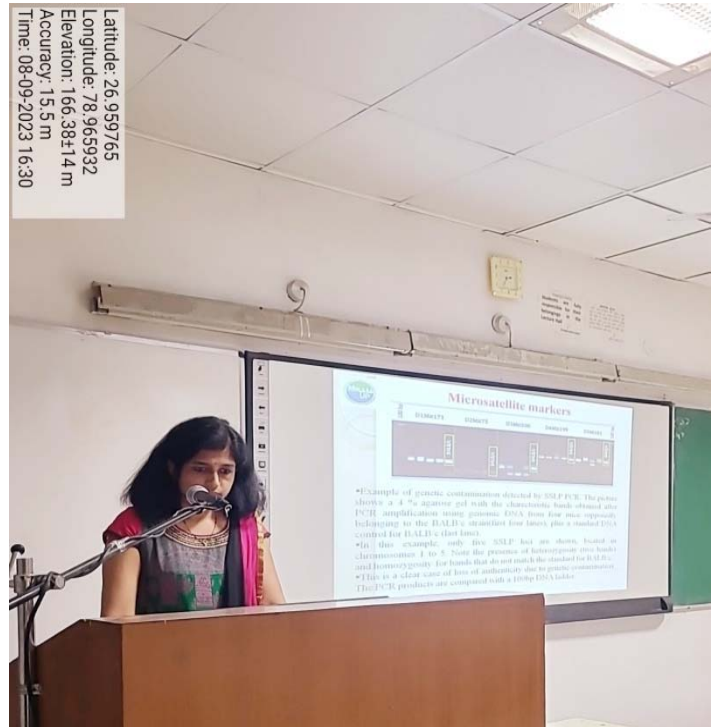
In the first part of the lecture, the information related to health monitoring programmes and the effects of various pathogens (viz. Sendai virus, Mouse Hepatitis virus, Rat corona virus, Pneumonia virus of mice, Minute virus of mice, Parvovirus, Kilham rat virus, Mouse Adeno virus, Lymphocytic Choriomeningitis virus, Mycoplasma pulmonis, Pin worm, Helicobacter etc.) on research results; FELASA recommendations for the Health monitoring programme; Conventional type animals, specific pathogen free animals, gnotobiotic animals, germ free animals, defined flora animals, restricted flora animals, murine pathogen free and virus free animals; lab animal health monitoring; frequency of monitoring; sample size; test methods for the presence of infection in animal population; serology; biochemical tests and microbiological culture examination for the presence of pathogens were provided.

In the second part of the lecture, the information related to the testing, sentinel animal health monitoring system & genetic monitoring of lab animals were provided. The sources of genetic contamination, goals of genetic monitoring (GM), and the methods of the GM viz. coat colour observation; mandibular measurement; biochemical marker analysis & immunological techniques; DNA-Based molecular techniques (Single nucleotide polymorphisms – SNPs, microsatellite marker analysis) and Fluorescence activated cell sorter (FACS) analysis to determine immunological profiling of mouse strains were discussed in detail.

The HOD, Microbiology Prof. (Dr.) Rajesh Kumar Verma, HOD, Physiology Prof. (Dr.) S. K. Sant, and HOD, Biochemistry, Prof. (Dr.) Kalbe Jawad and other senior faculty members, doctors, and PG students from different departments of the university attended the lectures.

Photographs of the event:-







**Dr. Amita Singh,
Veterinary Officer & In-Charge,
Department of Animal Husbandry,
UP University of Medical Sciences (Formerly UP Rural Institute of Medical Sciences & Research),
Saifai, Etawah, U.P.**

BRIEF RESUME

Dr. Amita Singh was born on 11th march, 1983. She graduated in Veterinary Science and Animal Husbandry in year 2005 from College of Veterinary and Animal Sciences, G.B. Pant University of Agriculture and Technology, Pantnagar and continued to obtain her Masters in Veterinary Surgery & Radiology in 2007 from there. Thereafter, she joined UP University of Medical Sciences (UPUMS), Saifai, Etawah as Veterinary Officer in February, 2007. She is the pioneer in designing and setting up the Animal House facility for experimentation and housing lab animals and sheep at UPUMS, Saifai. She has played a key role in getting the registration of the University for breeding and experimentation of small as well as large animals, from CPCSEA, New Delhi. She is qualified ICAR NET in Veterinary Anatomy and Surgery in the year 2008. She is also working as Officer In-Charge, Department of Animal Husbandry at UPUMS, Saifai, carrying out scientific care and management of lab animals and sheep. She has also worked as Principal Investigator/Co-Principal Investigator in relevant intramural Research Projects at UPUMS, Saifai. Also, she has completed online courses (January-May, 2021) of “Laboratory Animal Management” and “Preclinical Drug Research: Regulatory perspectives” from Indian Institute of Science, Bengaluru.

Her area of expertise includes basic & applied research and scientific care/management of lab animals and sheep. Her wide ranging research interests include surgical affections of Limb and hoof in dairy herd; Management of acute abdomen and critically ill traumatized patients; Anaesthetic, operative and post operative management of splenic trauma in dogs and Efficacy of combined therapy of Azadirachta indica and Lawsonia alba on wound healing in albino rats. She has around 20 Abstracts/ full length clinical cases/ Research papers published in NAAS (National Academy of Agricultural Sciences) referred National journals, souvenir and University magazine. Recently, five full length research papers of her as lead author, have also been published in reputed Indian/International journals in last two years.

She continues to take forward her research interests through active participation in various National/International symposiums/conferences of ISVS, LASAI, Association of Physiologists and Pharmacologists of India, Indian association of Medical Microbiologists and Indian Association of Preventive and Social Medicine. She has actively participated in online industrial trainings/ Webinars during COVID-19 pandemic. Recently, she attended online training programme on “Advances in diagnosis and management of ailments in pet animals” organized by Dept. of Veterinary Surgery and Radiology, C.V.Sc. & A.H., Mhow, M.P. She has also been a part of online training programmes on Basic techniques in Laboratory animal Care and Management, their use in Teaching, Testing and Research. She has attended national webinar on “ Biosafety Issues related to COVID-19 Testing and Zoonotic Diseases” organized by Dept. of Veterinary Public Health, C.V.Sc., DUVASU, Mathura. She has also completed The Paediatric Covid-19 Management Online Training conducted by Medical Education and Medical Health Department of Uttar Pradesh (23rd-26th August 2021). She is the recipient of the certificate of completion of the online session in “Basics of Feline Medicine”, recently organized by Oriheal Lifesciences Pvt. Ltd.(2022).

She is the member of many boards, committees and other organizations viz. Member Secretary, Institutional Animal Ethics Committee (IAEC) since 2007; Member, Institutional Ethics Committee (IEC) in 2007; Life

Member, Indian Society for Veterinary Surgery & Radiology (ISVS) since 2006; Member, Editorial Board, Indian Journal of Physiology & Pharmacology in 2009; Nodal Officer, Animal House Construction, UP RIMS &R, Saifai in 2011; Life Member, Laboratory Animal Science Association of India (LASAI) since 2017; Life Member, Laboratory Animal Scientists' Association (LASA), India since 2018. She is recipient of N.C.C. 'B' certificate; N.S.S. certificate. Also, she has participated and got medals in various tournaments/sports at University's athletic meets, Cross-Country race and in literary (Debate, Essay writing etc.) and cultural activities. She has been Joint Secretary, Veterinary Society (2002-03) and Member, Teaching Co-ordination committee (2000-01) at G.B.P.U.A & T., Pantnagar. She also served as Warden, Girl's Hostel at UPUMS and Member, Reception committee/Registration committee at Annual APPICON-2009 at UPUMS, Saifai.

Among other honours, she is the recipient of Best Veterinary Student award (2000-2001) from Pantnagar University. To her credit, she has designed the Standard Operating Procedures (SOPs) for 'Institutional Animal Ethics Committee (IAEC)'; SOP for 'Animal house Activities' and SOP for Investigators/Researchers working in Animal Lab at UPUMS, Saifai. She has been recognized for outstanding contribution to Animal husbandry programmes in the benefit of field and contemporary Society awarded to her by Department of Animal Husbandry, U.P. & Laboratory Animal Science Association of India (LASAI) in the year 2018. She is the recipient of Inspiring Lady Veterinarian Award 2021, awarded by Pashudhan Praharee. She is also awarded the Certificate of appreciation for her dedication in serving the community during the challenging times of COVID-19 Pandemic as a COVID WARRIOR on the occasion of Doctor's day (1st July 2021). She is also serving as nodal officer for Women empowerment, Act 2014 from UPUMS, Saifai, under the "UP state Women Empowerment Mission" since 2015.