

JSS College of Pharmacy
Sri Shivarathreeshwara Nagara, Mysuru-570 015
Institutional Animal Ethics Committee (IAEC)

**One day Workshop on
CPCSEA GUIDELINES FOR ANIMAL EXPERIMENTS**

On Thursday 1st August 2019

VENUE: Sri Rajendra Auditorium

The Inaugural session started with the dignitaries, Dr. T.M Pramod Kumar, Principal, JSS College of Pharmacy, Mysuru and Chairman IAEC, Dr. S. N Manjula, Professor and Head, Dept. of Pharmacology, Dr. K.L Krishna, Asst Professor and Member Secretary IAEC on the dais. The invocation song was performed to invoke the Holy Spirits of the Divine. The Session was hosted by Dr. P Vengal Rao, Lecturer, Dept. of Pharmacology.



Dr. KL Krishna who is the member secretary of IAEC and Assistant Professor, Dept. of Pharmacology was invited to the podium to give opening remarks on the workshop. He discussed about how the workshop was conceptualised and discussed about various approaches he and his team worked to help the researchers fill the applicable requirements by the IAEC and Form B. He discussed about how the workshop was planned and stated that the workshop was open for anyone interested in animal experiments in their research. He briefed about the tenure of the entire session and about the different speakers, their topics and the necessary information which will be provided throughout the session. He assured in his speech that the session will be highly informative and would be of great help for the researchers. He also discussed the future plans about conducting hands-on workshop and details about experimental pharmacology. He invited the Principal Dr. T.M Pramod Kumar to the stage to welcomed him for the today's program by Mrs. Mahalakshmi A.M, Lecturer, Dept. of Pharmacology. The Professor and Head Dr. S.N Manjula was welcomed by Ms.

Seema Mehdi, Lecturer, Dept. of Pharmacology. In the end, Dr. B.M Gurupadayya welcomed Dr. K.L Krishna.



The Dignitaries, Organisers and the delegates were invited over the stage for lightening of the lamp.



Dr. T.M Pramod Kumar, The principal was invited to the stage and he greeted the pharmacology department and appreciated their efforts for organizing the workshop. He mentioned the contribution of the JSS Academy of Higher education & Research for contributing and sponsoring the entire event. He discussed some of his memories where he experienced the flaws of not following the ethical guidelines and also about the compassion that is required among the researchers to perform animal studies in a humane manner. He

informed everyone about the new central animal house facility established by JSSAHER and requested the delegates to visit the facility in their leisure time during the session.

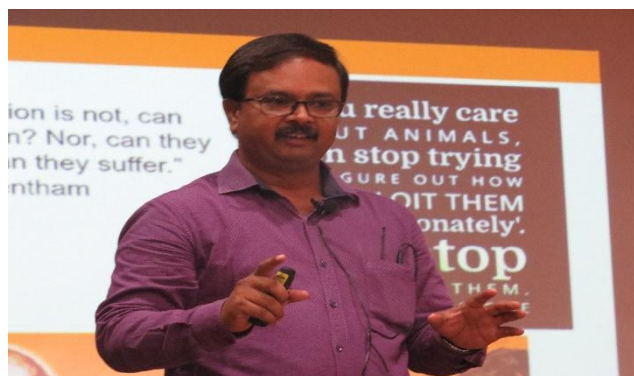
Dr. S.N Manjula was invited on the stage to propose vote of thanks for the inaugural session. She thanked the University for the Financial Support for the conductance of the workshop. She thanked the honourable guests for taking out their precious time for attending the workshop. She thanked her colleagues and delivered the vote of thanks to each and every one who were involved directly or indirectly in conducting the workshop.



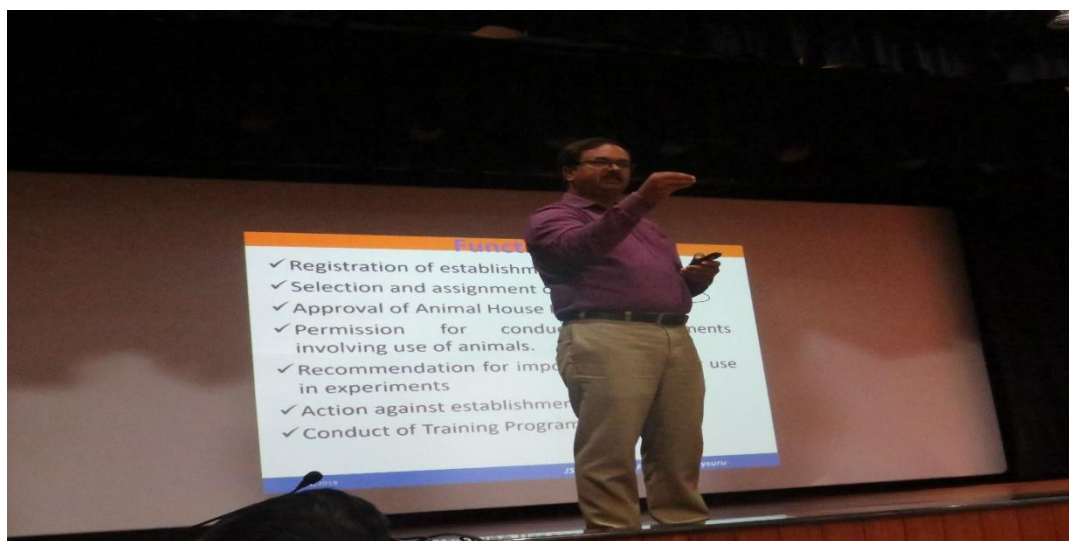
The First session:

CPCSEA GUIDELINES FOR ANIMAL EXPERIMENTATION

Dr. K.L KRISHNA, Member secretary, CPCSEA Nominee



The First session began which was hosted by Dr. K.L Krishna, He briefly introduced about the topics he focused on, mainly how to fill FORM-B. He discussed about the CPCSEA governing body and about people's perception about it. He clarified that CPCSEA never denies the approval of animal experiments. He beautifully presented the important Quotes by Big historical personalities and their views about how the animals should be treated by humans. He discussed about the psychological relationship with the physiological properties and related them with the animal behaviour. He discussed about the contents which contains CPCSEA overview, guidelines, 4R's principle and the regulatory requirement for animal experimentation.



He stated the legal and judicial mentions about the Prevention of Cruelty to Animal act, in India, and its other versions worldwide. He discussed about the various ministries who took charge of CPCSEA through the tide of time. He briefed about the objective of CPCSEA and functions of CPCSEA. He detailed about the 4R's that is Replacement, Reduction, Refinement and Rehabilitation. He focused specially about thoroughly referring the established literature while discussing about refinement. He briefly discussed about the guidelines for animal house facilities under CPCSEA. He focused seriously on the responsibility of taking care of animals. He shortly discussed about the basic requirements for animal experiment.

He moved on to detail about FORM-A and FORM-B, and taught how to fill the FORM-B. He showed the components of FORM-B. He concluded explaining about what has to be done after IAEC permission, animal experiments and after animal experiments and discussed about FORM-D. He was felicitated by Dr. Yogesh Kumar. The session departed for a tea break.

The Second session:

ETHICS AND INTRECACIES IN EXPERIMENTS AND SUITABLE ANIMAL MODELS

Dr. C SARAVANA BABU, Associate Professor Dept. of Pharmacology



Dr. C. S Babu started his session by briefly introducing about animal models. He shared the importance and the types of various animal models, when and what to select for obtaining optimum results. He discussed about the induced, spontaneous mutant and induced mutant models. He put light on to the biomedical experimental models discussing about explanatory models, which is self-explanatory and concept models, predictive models which carry hypotheses. He discussed about the various legislative and legal acts that are in place in reference with the humane animal treatment worldwide and in India. He discussed about the statistics of various animals that are popularly used in biomedical research. He focused on Small and Large animals and their applicable regulatory requirement pointing out the inbred and outbred animals.



He discussed about the correlation between human age and rat age. He explained about the barriers such as the Emotional, Judicial and Moral obligations. He discussed about a Scientist's viewpoint about animal experimentation and stated that handling of data proves the ethics. He showed an ideal layout for an animal facility imposing light on maintenance, hygiene environment and introduced about the new animal facility established at JSSAHER. He explained about the different equipment to be used and calibration parameters, the staff which would be employed and the basics steps in the experimentation to be implemented in any animal study. He discussed about the air ventilation, humidity and illumination parameters to be taken care of. He discussed about scaling of doses and its conversions and the factors related to experimentations. He focused on the point that training is an optimum necessity and concluded his sessions.

The Third session:

LABORATORY ANIMAL PHYSIOLOGY AND DATA COLLECTION IN ANIMAL EXPERIMENTS

Dr. S.P MUTHUKUMMAR, Principal Scientist and Head, CFTRI, Mysore



Dr. Muthukumar an eminent guest speaker started the session with discussing about the variables in animal experiments which should be only the test substance. He discussed about the management of error distribution. He discussed about properly using randomization of animals and the flaws one might encounter if not followed properly. He discussed about the replacement of animal models and introduced the concept of human micro dosing. He explained about the reasons about why 75% of the drugs fail in the clinical trial phases. He described about the animals mostly used in animal experiments based on the variety of the strains that are available. He discussed about the importance of using the right strain of animals. He stated that the quality of the test material is of imperative importance.



He discussed about the physiological data that has to be studied before planning an experiment. He discussed about the importance of studying the historical controlled data. He introduced about the Lab animal database (LADB). He stated that selection and confirmation of the sex of the animal. He shared an Annexure which contains the physiological norms of commonly used laboratory animals. He discussed about animal behaviour in a cage. He shared some surprising unknown concepts of mice birth and rat birth. He discussed about the blood parameters to be maintained and can be collected mentioning the sampling sites. He discussed about the diet composition to be used in the experimental animals. He conceptualised the pain signals and body language to be identified in the lab animals and gave an account on acclimatisation. He discussed about the light and noise control, food and bedding material.

He concluded the session by giving an account on the various animal handling training program offered at CFTRI, diagnosis of animals and maintaining its quality. He received felicitation from Dr. K.L Krishna, The organizer of this event.

The Fourth session:

BASIC TECHNIQUES USED IN ANIMAL EXPERIMENTATION

Dr. SARAVANAN M, Head, Dept. of Toxicology, Vipragen Biosciences



Post Lunch, the session resumed with the eminent guest speaker, who is a Head of the department of toxicology in Vipragen Biosciences Pvt. Ltd Mysore. He started his session by discussing about his company.

Then he started familiarising with the GLP quality systems. He went on to discuss the aspects of study conduct. He informed about the training of individual's training for quality system as their organisational process. He explained the role of a study director. He discussed about the importance of a well-defined study plan. He explained about dose calculation and dose conversion from human dose to Rat dose and vice versa. He also discussed about the dose conversion between species. He discussed about the various route of administration. He discussed about necropsy procedures. He taught how to isolate every organ from a rat body.



He concluded his session by briefing about the Three R's/which was earlier discussed by Dr. Krishna. Dr. Sumana Faculty, Govt. Ayurvedic Medical College, Mysuru felicitated him.

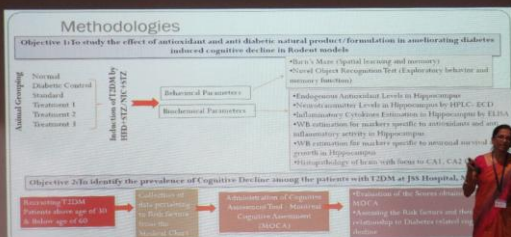
The Fifth session:

DESIGN OF ANIMAL EXPERIMENTAL PROTOCOL

Dr. S. N MANJULA, Professor and Head, Pharmacology.



Dr. Manjula S.N started her session by discussing about the general aspects of research and literature search. She gave an insight about the global scenario of research. She shortly discussed about the eight step model for carrying out research. She discussed about the formulation of research problem. She discussed the stepwise research procedures. She detailed about the importance of literature review search. She conveyed the scholars to systematically approach the literature search. She explained about what is hypotheses. She discussed about the characteristics of a hypothesis and its phases.



She explained about experimental design by putting light on experimental design. She discussed about confirmatory and exploratory experiments. She gave an example of a research work flow, a work being studied by one of her research scholars. She gave inputs about grouping of animals and their randomisation. She gave an example of another research work being carried out by one of her research scholar and explained about his hypotheses and the methodology. In another example of a research work being carried out by one of her research scholars she explained about the determination of research gaps. She summarised about the research gaps and how to formulate the hypothesis. The experiment that one designs should specifically address the research question. She was felicitated by Dr. Jayanthi, HoD of Pharmacology, JSS Medical college.

With great encouragement the session came to an end. The session paraded for feedback reception. Many delegates shared their valuable feedback and experience.

Dr. T M Pramodkumar
Chairman, IAEC

Dr. K L. Krishna
Member Secretary, IAEC

JSS College of Pharmacy, Mysuru

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