



**Rajarshi Shahu College of Pharmacy, Botha Road, Malvihir, Buldhana- 443001**  
**Department of Pharmacology**  
**Organized**  
**Certificate Course in Fundamentals of Preclinical Research**

**Day 1**

<b>Title of activity</b>	<b>: Certificate Course</b>
<b>Topic</b>	<b>: Introduction to Preclinical Research</b>
<b>Coordinator/s</b>	<b>: Mr. M.N. Devkar</b>
<b>Convenor</b>	<b>: Dr. Shirish P. Jain</b>
<b>Date</b>	<b>: 3 Feb 2020</b>
<b>Time</b>	<b>: 12.00 AM to 05.00 PM</b>
<b>Objective of program</b>	<b>: Participated students were learned about the importance and scope of preclinical research along with phases of drug discovery and development process</b>
<b>Expected outcome</b>	<b>: Student development</b>
<b>Funding agency</b>	<b>: Self-Funded (Institute Level)</b>
<b>No. of participants/delegates</b>	<b>: 37</b>

**Photos (if available), if it is online then add screenshots:**





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Certificate Course in Fundamentals of Preclinical Research

Day 1

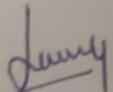
Rajarshi Shahu College of Pharmacy, Buldana organized 6 days certificate course in Fundamentals of Preclinical Research on 03 – 08 Feb 2020. The program was inaugurated by Respected Dr. Shirish Jain Sir, Principal RSCP, Buldana. The certificate course's scope and goals were introduced to the participants at the beginning by Dr. S. Jain. The course's goals include the fundamental requirements for preclinical research, the rational guidelines for the housing and care of the animals used in preclinical laboratories, the concept of the safety and efficacy of drugs along with the necessity of following ethical procedures when using animals in experiments, and the assessment of the safety and efficacy of test drugs.

The first session of first day training course was Co-ordinated and conducted by Mr. Mangesh Deokar, Assistant Professor from Pharmacology Department RSCP, Buldana. He started his session from the main objective of this course by providing the knowledge regarding fundamentals of preclinical research to the participated students. He began by talking about the need of treating experimental animals with compassion. The goal of the workshop and programmer was to educate college students and teachers on the moral ramifications of animal testing.


Sir, also shared the introduction of various animals used in preclinical laboratory along with its species and strain and their relevance in different protocols. Moreover, sir also emphasized on the important aspect of preclinical research i.e. in-vivo and in-vitro pharmacology.

At the end of the program vote of thanks was proposed by Mr. S.S. Hurdade, Assistant professor, Department of Pharmacology, RSCP, Buldana.

Date: 3<sup>rd</sup> Feb 2020

  
Program Coordinator



  
Principal  
Principal  
Rajarshi Shahu College of Pharmacy  
Malvihir, Buldana.





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Department of Pharmacology

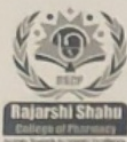
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Certificate Course in Fundamentals of Preclinical Research

Day 2

Title of activity	: Certificate Course
Topic	: Introduction to CPCSEA guidelines and Requirement of Animal House Facility
Coordinator/s	: Dr. S. P. Zambad
Convenor	: Dr. Shirish P. Jain
Date	: 04 Feb 2020
Time	: 11.00 AM to 04.00 PM
Objective of program	: To learn and acquire the basic knowledge about CPCSEA guidelines for animal study
Expected outcome	: Students learning
Funding agency	: Self-Funded (Institute Level)
No. of participants/delegates	: 37
Photos (if available), if it is online then add screenshots:	





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### Day 2 Course Report

The Second day of program was Co-ordinated by Dr. Shitalkumar Zambad, faculty member from Department of Pharmacology, RSCP, Buldana. He has started his session by sharing the main objective of the session include importance of 4 R's principle in preclinical research. Initially, he discussed mandate guidelines for the use of the 4Rs principles and requires researchers to obtain approval from an institutional animal ethics committee before conducting any experiments involving animals. The guidelines also require the proper care and housing of animals, as well as monitoring of their health and welfare etc.

Moreover, sir also shared and discussed the CPCSEA guidelines in order to support ethical and humane research practices and to advance scientific rigour and reproducibility. This is advantageous for the research animals as well as for the standard of science and the application of findings to human health.

At the end of the program vote of thanks was proposed by Mr. S.S. Hurdade, Assistant professor, Department of Pharmacology, RSCP Buldana.

Date: 04<sup>th</sup> Feb 2019

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Day 3

Title of activity	: Certificate Course
Topic	: Basic Research Techniques
Coordinator/s	: Mr. Sandip S. Hurdade
Convenor	: Dr. Shirish P. Jain
Date	: 5 Feb 2020
Time	: 11.00 AM to 04.00 PM
Objective of program	: Students also gained the knowledge regarding Basic Research Techniques include including animal handling, various routes of drug administration in animals.
Expected outcome	: Students development
Funding agency	: Self-Funded (Institute Level)
No. of participants/delegates	: 37

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### Day 3 Course Report

Third day of course was coordinated by Mr. Sandip Hurpade, he was the faculty member from pharmacology department, RSCP, Buldana. Initially he shared the views about seminar amongst the students includes handling of experimental animals, various routes of drug administration along with its rational for research and education purpose in the drug development process.

He also emphasized on the objective of this course, to provide knowledge regarding how to use animals in education and research and appropriate way to handle them without inducing stress in animals to complete the need of various experimental procedures used in behavioral pharmacology. He also discussed about the regulation regarding housing of an experimental animals. Moreover he has explained the operation in animal house facility. He has demonstrated the various routes of drug administration including oral, intra-peritonium, subcutaneous, intravenous and intramuscular.

At the end of program vote of thanks was proposed by Mr. M.N Devkar & Total 37 students were benefited by this session

Date: 5<sup>th</sup> Feb 2020

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**Day 4**

<b>Title of activity</b>	<b>: Certificate Course</b>
<b>Topic</b>	<b>: Understanding the Basic Concept of Pharmacology and Toxicology</b>
<b>Coordinator</b>	<b>: Dr. Shirish P. Jain</b>
<b>Convenor</b>	<b>: Dr. Shirish P. Jain</b>
<b>Date</b>	<b>: 6<sup>th</sup> Feb 2020</b>
<b>Time</b>	<b>: 11.00 AM to 04.00 PM</b>
<b>Objective of program</b>	<b>: To learn and acquire the basic knowledge of pharmacology To gain the knowledge about In-vitro and in-vivo pharmacology, along with OECD guidelines</b>
<b>Expected outcome</b>	<b>: Students Development</b>
<b>Funding agency</b>	<b>: Self-Funded (Institute Level)</b>
<b>No. of participants/delegates</b>	<b>: 37</b>

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#### Day 4 Course Report

The fourth day of programme was Co-ordinated by Dr. Shirish P. Jain , Professor from pharmacology department. At the beginning, he reviewed the fundamentals and introduction to in-vitro and in-vivo pharmacology. He also covered the requirements, various animal models, and its use in behavioural pharmacology and molecular pharmacology of the experimental animals.

Additionally, he focused on the theoretical aspects of division of Pharmacology, sources of drugs which include pharmacokinetic, pharmacodynamic, importance of therapeutics index, determination of LD<sub>50</sub>, ED<sub>50</sub>, Acute, Subacute and chronic toxicity along with Safety pharmacology core battery test. At the end of the program vote of thanks was proposed by Mr. S.S. Hurdade, Assistant professor, Department of Pharmacology, RSCP, Buldana

Date: 6<sup>th</sup> Feb 2020

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Day 5

Title of activity	: Certificate Course
Topic	: Understanding Concept of Regulatory Affairs in Preclinical Research
Coordinator/s	: Dr. Shitalkumar Zambad
Convenor	: Dr. Shirish P. Jain
Date	: 7 <sup>th</sup> Feb 2020
Time	: 11.00 AM to 04.00 PM
Objective of program	: To understand the purpose and rationale of regulatory requirements for preclinical research, including good laboratory practices (GLP), animal welfare regulations
Expected outcome	: Students development
Funding agency	: Self-Funded (Institute Level)
No. of participants/delegates	: 37

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### Day 5 Course Report

Dr. Shitalkumar Zambad , a faculty member from pharmacology department, coordinated the fifth day of the programme. In the beginning, he reviewed the development of a new drug or medical devices complies with the regulation and guidelines set by the regulatory authorities. He also explained the conduction of preclinical studies as accordance with the Good laboratory Practices (GLP) which helps to quality and integrity of data generation

Moreover also, he emphasised the importance of testing products on animals before trying them on humans. He also discussed the significance of the regulatory affairs department in creating and implementing processes to assure that preclinical research is carried out in accordance with all applicable rules and regulations.. At the end of the event Mr. M. N. Deokar, Assistant Professor, Department of Pharmacology, RSCP, Buldana, proposed a vote thanks.

Date: 7<sup>th</sup> Feb 2020

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Day 6

Title of activity	: Certificate Course
Topic	: Data Analysis and Interpretation: Applications of various Statistical tests in Research
Coordinator/s	: Mr. S.S. Hulpade
Convenor	: Dr. Shirish P. Jain
Date	: 8 <sup>th</sup> Feb 2020
Time	: 11.00 AM to 04.00 PM
Objective of program	: Participated students were learned and gained knowledge about fundamental principles of statistical analysis, data interpretation, and scientific communication
Expected outcome	: Students development
Funding agency	: Self-Funded (Institute Level)
No. of participants/delegates	: 37
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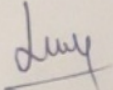


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
**Day 6 Program Summary**

The final training session was led by Mr. S.S. Hurdade, a senior professor in the pharmacology department. The session was chaired by Dr. Shirish P. Jain. Mr. S.S. Hurdade greets the students and briefly discusses the significance of statistics, data analysis, and parameter setting. Sir, also encourage the students for hypothesis test rather than investigating the data with summary statistics and charts first. Dr. Shitalkumar Zambad senior faculty from pharmacology department narrates the selection of appropriate statistical method and interpretation. About total 37 students of B. Pharm was benefited from 6 days certificate course program. The program was finally concluded by Mr. M. N. Devkar's by proposed with vote of gratitude and the distribution of certificates to the students.

Date: 8<sup>th</sup> Feb 2020

  
Program Coordinator



  
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