

RBVRR WOMEN'S COLLEGE OF PHARMACY



& 3-4-343, Barkatpura, Hyderabad - 500 027 (T.S), India

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Accredited by NAAC,

Approved by the PCI & Affiliated to Osmania University

Recognized under Section 2(f) of the UGC Act 1956

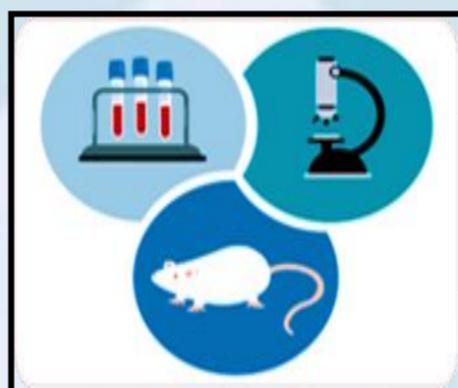
EAMCET Code: RBVW | PGECET Code: RBVW1



College Code: 1706

www.rbvrrwcp.org | Email: rbvrrwcp@rediffmail.com & rbvrrwcp2006@gmail.com

Organizing Certificate course on



Preclinical Screening Techniques

23rd- 28th June, 2025

Registration link

<https://forms.gle/VDhhSXC6Uj9rpSNo7>

Last Date of Registration on/ before **21st June 2025**

Registration Fee-**500/-**

Scan to
Pay



G-pay-9298806033

Target Audience:
Pharmacy, Medical
& Life Sciences
Students

For queries:

9985697677, 9298806033

Email: cology.rbvrr21@gmail.com



About RBVRR Women's College of Pharmacy

RBVRR Women's College of Pharmacy, established in 2006 under the Hyderabad Mahila Vidhya Sangam, is driven by the visionary leadership of its Founder Principal, Prof. M. Sumakanth. The college is dedicated to empowering girl students through education and offers spacious classrooms, state-of-the-art laboratories, a well-equipped seminar hall, a conference room, and a library stocked with a wide range of the latest textbooks, reference materials and a digital library.

The college is offering the following programmes:

B. Pharmacy (100)

Pharm. D (32)

M.Pharmacy (Pharmaceutics, Pharm. Analysis and Pharmacology)

VISION:

To be a National Women Pharmacy Professional leader in transforming lives through innovative, vigorous and compassionate approach to Pharma education.

MISSION:

RBVRRWCP preparing and empowering girl students by providing continuous awareness programmes to succeed in changing world apart from regular curriculum.

Objective and Scope of the certificate course

This course aims to provide a comprehensive understanding of preclinical screening techniques essential in the drug development process. It covers the various phases of drug discovery, with a focus on *in vitro*, *in vivo*, and *in silico* methodologies used to evaluate pharmacological and toxicological properties of new drug candidates.

Emphasis is placed on ethical principles such as the 3Rs (Replacement, Reduction, Refinement) to ensure humane animal use. The course also introduces students to key regulatory frameworks established by agencies like the FDA, EMA, and WHO, highlighting the importance of Good Laboratory Practices (GLP) in ensuring data integrity.

Additionally, hands-on experience with simulation platforms and data analysis tools equips students with practical skills in experimental design, result interpretation, and decision-making in preclinical research.

Course: Preclinical Screening Techniques

Value Added Course

Code: RBVRRWCP-PL02

Total No. of Hours-30

SYLLABUS

Unit 1: Introduction to Preclinical Screening Techniques



Importance of preclinical screening in drug development
Phases of drug development: Discovery, preclinical, clinical
Ethical considerations (CCSEA guidelines) and the 3R principles (Replacement, Reduction, Refinement)

Unit 2: *In Vitro* Techniques



Definition, advantages, limitations, and ethical aspects of *in vitro* techniques.
Cell/tissue-based assays, receptor binding, enzyme inhibition, and advanced technologies like organs-on-chips and AI applications

Unit 3: *In Vivo* Techniques



Introduction, Scope and importance in Drug Discovery and Development.
Animal models: Selection, handling, rodent and non-rodent types. Pharmacological assays: Drug administration, dose-response, therapeutic index. Pharmacokinetics: ADME studies *in vivo*. Statistical Analysis and Data Interpretation in Preclinical Research

Unit 4: Toxicological Screening



Principles of toxicity testing: Acute, sub-acute, chronic studies
Toxicity screening methods: Genotoxicity, Reproductive and teratogenicity studies.
Computational toxicology: *In silico* tools and AI-based prediction

Unit 5: Regulatory Guidelines



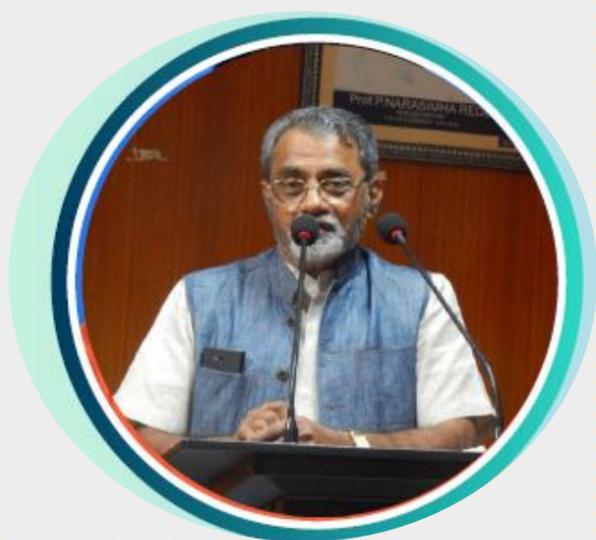
Regulatory guidelines and their importance in drug development
Regulatory agencies: FDA, EMA, ICH, WHO and their roles in preclinical studies.
Good Laboratory Practices (GLP) and data integrity

Course Outcomes

Upon completion of the course, students will be able to:

- Understand the preclinical screening in drug development.
- Know the applications of *in vitro* and *in vivo* techniques in pharmacological and toxicological evaluation.
- Discuss the ethical considerations and regulatory guidelines in preclinical studies.
- Interpret preclinical data by using modern screening methods and computational tools.

PATRON



Prof.(Dr) K. Muthyam Reddy
Hon. Secretary & Correspondent

CONVENER



Prof. (Dr) M. Sumakanth
Principal, RBVRRWCP

CO-ORDINATOR

Dr. J Archana

Professor and Head, Dept. of Pharmacology

Organizing committee

Ms. Zeenath Banu
Senior Assistant Professor
Dept. of Pharmacology

Ms. Fatima Umaira Saeed
Assistant Professor
Dept. of Pharmacology

Mrs. M. Kavitha
Assistant Professor
Dept. of Pharmacology

Mrs. Mamtha Helchel
Assistant Professor
Dept. of Pharmacology

Our Speakers



Day-1: 23-06-2025

Dr. Sistla Ramakrishna
Chief Scientist
CSIR-IICT, Hyderabad



Day-2: 24-06-2025

Dr. Bharat Kumar Reddy
Assistant Professor
SVKM's Narsee Monjee Institute of
Management Studies



Day-3: 25-06-2025

Dr. Sunayana Audumbar Mali
Assistant Professor
Sahyadri College of Pharmacy
Maharashtra, India



Day-4: 26-06-2025

Dr. Raghavender Medishetty
Scientist, Center for Innovation in
Molecular and Pharmaceutical Sciences,
Dr. Reddy's Institute of Life Sciences,
Hyderabad



Day-5: 27-06-2025

Prof. (Dr) Kavimani Subramanian
Professor and Head
Mother Theresa Post Graduate and
Research Institute of Health Sciences
College of Pharmacy
Puducherry, Tamil Nadu



Day-6: 28-06-2025

Mr. PV Lalith
Senior Medical Writer
Parexel, Hyderabad

PROGRAMME SCHEDULE

DATE	MORNING SESSION 10:00 AM-12:30 PM	AFTERNOON SESSION 1:30 PM-4:00 PM
23-6-25	Dr. Sistla Ramakrishna Topic: Importance of preclinical screening in drug discovery and development	Dr. J. Archana Topic: Ethical considerations (CCSEA guidelines) 3R's in Animal Experimentation
24-6-25	Dr. Bharat Kumar Reddy Topic: Toxicological screening Computational toxicology: <i>In silico</i> tools and AI-based prediction	Ms. Zeenath Banu Topic: Hands-on training (Practical session)
25-6-25	Dr. Sunayana Audumbar Mali Topic : Regulatory guidelines and their importance in drug development Good Laboratory Practices (GLP) in the animal House facility	Ms. Zeenath Banu Topic: OECD guidelines
26-6-25	Dr. Raghavender Medishetty Topic: <i>Invitro</i> technique, cell based assay, enzyme inhibition assays and receptor binding assays	Dr. Raghavender Medishetty Topic: Advanced Technologies in <i>In Vitro</i> Research
27-6-25	Prof. (Dr) Kavimani Subramanian Topic: Tiny fish with great impact on preclinical research	Dr. J. Archana Statistical Analysis and Data Interpretation in Preclinical Research Hands on training
28-6-25	Mr. PV Lalith Topic Animal models: Selection, handling, rodent and non-rodent types.	Mr. PV Lalith Topic: Pharmacological assays and ADME studies <i>in vivo</i>

VALEDICTORY

4:00 PM Onwards