

#### Index MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, INDORE

NABL Certificate No. MC-3448 NABH Certificate No. PEH-2019-0966





(Unit of Mayank's Welfare Society) (Constituent Unit of Malwanchal University)

ACCREDITED BY NABH & NABL

IMCHRC/VAC/2024/08

Date - 1st June 2024

#### **CIRCULAR**

We are pleased to announce that a value added course on "Drug Discovery & Clinical Research" has been scheduled from 20<sup>th</sup> June to 22<sup>th</sup> June 2024 in the lecture hall no. 3 of index medical college, hospital and research centre, Indore.

It is being organized by the faculty of IMCHRC, Malwanchal University to train the MBBS  $-2^{nd}$ professional students about understanding the drug discovery & phases of clinical research. The course is free for all 2<sup>nd</sup> professional students. Interested students are requested to register for the course by 15th of June 2024.

Dean

IMCHRC, Indore

CC:

The Chairman

Vice Chairman

Vice Dean

Registrar - Malwanchal University

All Administrators

HODs of all Departments

Notice Board - college notice board, hostel - Boy's/Girl's, PG hostel

## MALWANCHAL UNIVERSITY

INDEX MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE, INDORE "Drug Discovery & Clinical Research"

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### ABOUT

Clinical trial is a prospective ethically designed investigation in human subjects to discover the new drugs.

# REGISTRATION

ELIGIBILITY: MBBS 2<sup>ND</sup> YEAR Co-ordinator: Dr. Akash

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Registration fee: 0

Dates: 20th to 22th June

2024

Venue: Lecture hall no. 3 of index medical college

# RESOURCE PERSON

Dr. Prem Nyati, Professor (Pharmacology) Dr. Suruchi Sharma, Assistant Professor (Pharmacology)

## MODULES:

➤ Module 1 : Clinical Trial -Phase 0 ➤ Module 2 : Clinical Trial -Phase I ➤ Module 3: Clinical Trial -

Phase II

≻Module 4: Clinical Trial -Phase II Module 4: Clinical Trial - Phase IV

## **OUTCOMES:**

Clinical researchGuidelines and Regulations▶ Pre Clinical Trials/Animal trials

➤ Human Clinical Trials

➤ Compliance & Quality Assurance in clinical trials

▶ Pharmacovigilance

#### Time-Table Value Added Course Topic: Drug Discovery & Clinical Research For: - MBBS 2<sup>nd</sup> Year

	Day-1: (20/06/24)		
Title	Time	Speaker	
Drug discovery & Clinical Trials-Introduction	09:00am – 10:00am	Dr. Prem Nyati	
Clinical research Guidelines and Regulations:India & USA	10:00am – 11:00am	Dr. Suruchi Sharma	
Tea	11:00 – 11:15am		
Clinical Trial Planning and design	11:15am – 12:15pm	Dr. Prem Nyati	
Pre Clinical Trials/Animal trials	12:15pm – 01:15pm	Dr. Suruchi Sharma	
Lunch	01:15pm - 02:00pm		
Clinical trials phase -1	02:00pm - 03:00pm	Dr. Prem Nyati	
Clinical trials phase - 2	03:00pm - 04:00pm	Dr. Suruchi Sharma	
	Day-2: (21/06/24)		
Clinical trials phase -3	09:00am – 10:00am	Dr. Prem Nyati	
Clinical trials phase -4	10:00am – 11:00am	Dr. Suruchi Sharma	
Tea	11:00 – 11:15am		
Compliance & Quality Assurance in clinical trials	11:15am – 12:15pm	Dr. Prem Nyati	
Pharmacovigilance	12:15pm - 01:15pm	Dr. Suruchi Sharma	
Lunch	01:15pm - 02:00pm	CALL TO SERVICE STATE OF THE S	
Data Analysis and Management in Clinical Research	02:00pm - 03:00pm	Dr. Prem Nyati	
Basic Safety & legal issues	03:00pm - 04:00pm	Dr. Suruchi Sharma	
AND THE RESERVE OF THE PARTY OF	Day-3: (22/06/24)		
The regulatory authorities in Clinical Trial- CDSCO, EMA &FDA	09:00am – 10:00am	Dr. Prem Nyati	
Clinical Trial Calculations.	10:00am - 11:00am	Dr. Suruchi Sharma	
Tea	11:00 – 11:15am		
Clinical SAS programming	11:15am – 12:15pm	Dr. Prem Nyati	
Understanding Statistics in Clinical trial research	12:15pm – 01:15pm	Dr. Suruchi Sharma	
Lunch	01:15pm – 02:00pm		
Applications of Clinical Trial in Healthcare	02:00pm - 03:00pm	Dr. Prem Nyati	
Future prospects of Clinical Trials	03:00pm - 04:00pm	Dr. Suruchi Sharma	



Malwanchal University Indore (M.P.)

#### Report: Drug Discovery & Clinical Research

A value added course on "**Drug Discovery & Clinical Research**" was conducted from 20<sup>th</sup> June to 22<sup>th</sup> June 2024 in the lecture hall no. 3 of index medical college, hospital and research centre, Indore. This course was conducted for 18 hrs., where each section was conducted for 6 hrs.

In this era of bewildering new drug introduction and rapid attrition of older drugs, the doctor needs to have an overall idea of the manner in which new drugs are developed and marketed. Drug development now is a highly complex, tedious, competitive, costly and commercially risky process. From the synthesis/ identification of the molecule to marketing, a new drug takes at least I0 years and costs 500-1000 million US\$. As such invention and development of new drugs is now possible only in the set up of big pharmaceutical houses that a lone have the resources, infrastructure and dedicated teams of scientists to carry out the multiple specialized stages of the process. Though the pharmaceutical industry is often regarded cunning, greedy, unscrupulous, deceptive and fleecing the people, there is no denying that it is responsible for most of the progress in therapeutics as well as pharmacological knowledge of today.

#### Clinical trials

When a compound deserving trial in man is identified by animal studies, the regulatory authorities are approached who on satisfaction issue an 'investigational new drug' (ID) licence. The drug is formulated into a suitable dosage form and clinical trials are conducted in a logical phased manner. To minimize any risk, initially few subjects receive the drug under close supervision. Later, larger numbers are treated with only relevant monitoring. Standards for the design, ethics, conduct, monitoring, auditing, recording and analyzing data and reporting of clinical trials have been laid down in the form of 'Good Clinical Practice' (GCP) guidelines by an International Conference on Harmonization (ICH).

National agencies in most countries, including ICMR in India, have also framed ethical guidelines for clinical trials. Adherence to these provides assurance that the data and reported results are credible and accurate, and that the rights, integrity and confidentiality of trial subjects are protected as enunciated in the *Helsinki Declaration* of the World Medical Association. The requirements and regulations for the conduct of clinical trials on a new drug in India have been laid down in the schedule Y of the Drugs and Cosmetics Rules. The clinical studies are conventionally divided into 4 phases.

Modules:

Phase 0: Microdosing study

Phase I: Human pharmacology and safety

Phase II: Therapeutic exploration and dose ranging

Phase IV: Therapeutic confirmation/Comparison

#### Phase IV: Postmarketing surveillance/data gathering studies

Clinical trial is a prospective ethically designed investigation in human subjects to objectively discover/verify/compare the results of two or more therapeutic measures (drugs). Clinical trials are designed to answer one or more precisely framed questions about the value of treating equivalent groups of patients by two or more modalities (drugs, dosage regimens, other interventions). Depending on the objective of the study, clinical trial may be conducted in healthy volunteers or in volunteer patients. Healthy volunteers may be used to determine pharmacokinetic characteristics, tolerability, safety and for certain type of drugs (e.g. hypoglycaemic, hypnotic. diuretic) even efficacy. For majority of drugs (e.g. antiepileptic, antipsychotic, antiinflammatory, antitubercular, etc.) therapeutic efficacy can only be assessed in patients.

At the end of the course, participant will learnt about:

- Clinical research Guidelines and Regulations
- Pre Clinical Trials/Animal trials
- Human Clinical Trials
- Compliance & Quality Assurance in clinical trials
- Pharmacovigilance

Course coordinator

Registrar Registrar Malwanchal University Indore (M.P.)



#### Index Medical College, Hospital & Research Center Indore M.P. Department of Pharmacology MBBS 2nd Year

#### Value Added Course: Drug Discovery & Clinical Research Attendance Sheet

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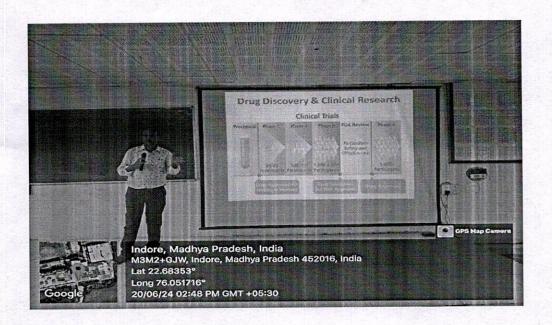
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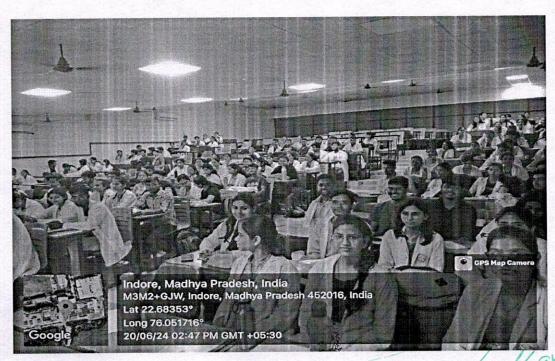
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