NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA
DEPARTMENT OF PHARMACOLOGY

OFFERING ADD ON COURSE ON

ALTERNATIVES TO ANIMAL MODELS

AIM

This course introduces students to alternatives to animal models used pharmaceutical and bio-medical research. The course will explore ethical concerns, in vitro, in silico, ex vivo, and other advanced methods, providing students with comprehensive understanding of how these techniques replace or reduce animal use in drug discovery, testing, and disease modelling.
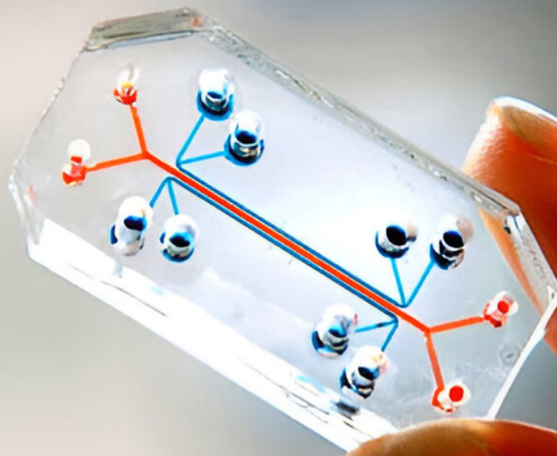
COURSE OBJECTIVES

1. Understand the ethical and regulatory considerations of animal testing.
2. Familiarize students with alternative testing methods (in vitro, in silico, ex vivo).
3. Evaluate the scientific advancements and challenges of each alternative.
4. Apply these alternatives in drug development and toxicity testing.
5. Discuss emerging technologies and future directions in reducing animal testing.

COURSE OUTCOME

1) Understand the ethical, regulatory, and scientific challenges of animal testing.
2) Recognize the various alternatives to animal models used in pharmaceutical research.
3) Apply knowledge of in vitro, in silico, and ex vivo techniques in drug development.
4) Analyse the advantages and limitations of non-animal methods.
5) Discuss the future trends in alternatives to animal models and their potential in pharmaceutical industry applications

START DATE:

01/07/2024

END DATE:

31/07/2024

ASSESMENT MODE

Examination (multiple choice questions)

PASSING CRITERIA

Candidates must score 50% marks in the examination

COURSE CO ORDINATOR

Ms.Maneesha Peter
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