

NEELIMA INSTITUTE OF MEDICAL SCIENCES
MODEL- MAKING ACTIVITY FOR 2nd YEAR MBBS STUDENTS
Organised by- DEPARTMENT OF PHARMACOLOGY
Date- 2nd, 3rd and 4th June 2025

Event Overview-

The Department of Pharmacology at Neelima Institute of Medical Sciences successfully organized a comprehensive three-day "Model Making Activity on Chemotherapy – Mechanism of Action" for second-year MBBS students from June 2nd to 4th, 2025. This innovative educational initiative aimed to enhance students' understanding of complex chemotherapeutic mechanisms through hands-on learning and creative visualization.

Participation and Leadership

The event witnessed enthusiastic participation from 148 students, who were organized into collaborative teams to develop comprehensive models demonstrating various chemotherapy mechanisms.

The activity was conducted under the expert guidance of distinguished faculty members, led by Dr. Vasavi Patra, Head of Department, along with Dr. Venu, Dr. Kalpana Dr. Venkat Raman and Dr. Swati, who served as mentors and evaluators throughout the three-day program.

The respected and beloved Dean of the institute Dr. B Lakshmi Prasanna madam motivated the students and appreciated their efforts encouraging them to participate in more such events showcasing their creativity. She also appreciated the Department of Pharmacology for implementing such unique and innovative ways in the study course to help students understand the concepts so well .



Educational Objectives and Implementation

The primary objective was to transform abstract pharmacological concepts into tangible, visual representations that would facilitate deeper comprehension of chemotherapeutic drug actions. Students created diverse models illustrating mechanisms such as DNA alkylation, antimetabolite interference with nucleotide synthesis, topoisomerase inhibition, cell wall synthesis inhibition, targeted molecular therapy pathways, protein synthesis inhibition and antiretroviral actions.

The activity encouraged students to explore cell cycle-specific actions, drug resistance mechanisms, and combination chemotherapy principles.



Event Highlights and Assessment

Each day focused on different aspects of chemotherapy mechanisms, allowing students to develop comprehensive understanding progressively.

Faculty members provided continuous guidance, ensuring scientific accuracy while encouraging creative expression. The evaluation process considered multiple criteria including conceptual clarity, scientific precision, innovative presentation methods, and effective teamwork.



Outcomes and Impact

The model making activity successfully achieved its educational goals, with students demonstrating improved conceptual understanding and enhanced retention of pharmacological principles. Participants reported increased confidence in explaining complex mechanisms and greater appreciation for the intricacies of chemotherapy.

Faculty feedback highlighted the effectiveness of experiential learning in pharmacology education, with plans to incorporate similar activities into future curriculum modules.

The event fostered collaborative learning, scientific communication skills, and creative problem-solving abilities among future medical professionals, establishing a foundation for advanced pharmacological studies and clinical practice.

