

IIC Self Driven Activity



Ministry of Education's
INNOVATION CELL
(GOVERNMENT OF INDIA)

Guest Lecture on “Smart Medicine: AI and IoT Transforming Diagnostics and Remote Monitoring-*“Bridging Technology and Clinical Practice for the Future of Healthcare”*”

Title: AI and IoT Transforming Diagnostics and Remote Monitoring

“Bridging technology and clinical practice for the future of healthcare”

Date: 13.08.2025

Organizing Department: General Medicine

Coordinator: Dr. S. Girija, Professor & HOD, Dept. of General Medicine

Time: 12.00 pm

Venue: Basement Auditorium (SMVMCH)

Guest Speaker: Dr. Natesan Damodaran, Senior consultant, Neurosurgeon, Gleneagles hospitals, Chennai

Participant Details: 80 participants, 20 Faculties and 60 Postgraduate and UG students (2021 & 2021 batch)

Summary:

The Faculty of General Medicine organized an insightful session on Smart Medicine, focusing on the integration of Artificial Intelligence (AI) and Internet of Things (IoT) in modern healthcare. The event aimed to familiarize undergraduate and postgraduate students with emerging technologies that are reshaping diagnostics and patient monitoring.

The session commenced with a welcome address and an introduction to the theme by the Head of the Department of General Medicine. The guest speaker, Dr. Natesan Damodharan, Senior Consultant Neurosurgeon, Gleneagles Hospital, Chennai, was then invited to address the audience.

Dr. Damodharan began by highlighting how AI is increasingly influencing clinical diagnostics, particularly in neurosurgery. Using real-world examples from epilepsy surgery, he demonstrated how AI

algorithms and advanced neuroimaging techniques—such as BG MRI mapping—are integrated for precise surgical planning and execution.

He shared case studies of complex epilepsy surgeries where identifying the seizure focus was challenging, but AI-assisted matching and analysis made the process more accurate. Dr. Damodharan also discussed:

- The importance of multidisciplinary teamwork in implementing AI-based surgical planning.
- Potential pitfalls, such as overwhelming datasets and poorly curated information that can compromise algorithm accuracy.
- Ethical and practical considerations in adopting AI for patient care.

An interactive Q&A session followed, where students asked about:

- How to identify a research-worthy question in patient care.
- Building the right collaborative team.
- Timeframes and workflow for AI-assisted projects.
- The process of defining and refining AI algorithms.

Dr. Damodharan concluded by encouraging participants to approach AI not as a replacement for clinical reasoning, but as a tool to answer meaningful clinical questions. He emphasized that every clinician should begin with a patient-care challenge and explore how AI can be applied to solve it.

The program concluded with a vote of thanks delivered by Dr. J. Sathyanarayanan, Associate Professor of Medicine, appreciating the speaker's valuable insights and the enthusiastic participation of the audience.

Sri MANAKULA VINAYAGAR
Medical College and Hospital
An Autonomous Institution

Department of General Medicine presents

SMART MEDICINE: AI AND IOT TRANSFORMING DIAGNOSTICS AND REMOTE MONITORING"

-BRIDGING TECHNOLOGY AND CLINICAL PRACTICE FOR THE FUTURE OF HEALTHCARE

Guest lecture

Dr. Natesan Damodaran
Senior Consultant Neurosurgeon
Gleneagles Hospital, Chennai

venue: Basement auditorium

13 August, 2025
12 noon

Join us for the lecture

