

## Guest Lecture Report

**Topic: “Interplay between gut microbiota and dietary fibers in the liver cancer: The dark side of fermentation.”**

Venue: JSS College of Pharmacy

Date: 21<sup>st</sup> March 2022

By,

Dr Matam Vijay Kumar

Professor,

Director of university of Toledo microbiome consortium

Toledo, Ohio.

The guest lecture by our honored speaker Dr. Matam Vijay Kumar, Professor and director of university of Toledo microbiome consortium Toledo, Ohio on the subject “Interplay between the gut microbiota and dietary fiber in the liver cancer, the dark side of fermentation” was organized by the Department of Pharmacology, JSS College of pharmacy Mysore on 21<sup>st</sup> March 2022.

In his talk professor Vijay Kumar emphasized on gut microbiota and its importance in the proper physiological functioning of the body. Primarily the role of gut microbiota on the metabolic functions and dysbiosis associated metabolic syndromes. He also focused on how fortified and refined soluble dietary fibers (inulin) may interplay role in development of hepatocellular carcinoma (HCC) by altering gut microbiota. During the course of lecture, Dr. Vijay explicated about his studies on T5KO mice wherein inulin exhibited improved metabolic syndromes however it was also revealed that it was also associated with development of cholestasis and HCC. Such were supported by various serum analysis, histopathological studies and biochemical analysis which indicated that in small ratio of TK50 mice population administration of inulin (7.5%) of total 10% fiber led to development of HCC.

Indicating that consumption of refined soluble fibers led to dysbiosis or increased number of fermenting bacteria which was found to be an interlink between the development of HCC.

He concluded his talk conveying risk associated with soluble dietary fibers explaining that all fibers are not essentially beneficial with a notion that **“refined fibers need to be redefined”**.

The talk was found to be very informative and interactive. The session was concluded by Dr. S. N. Manjula, Head, Department of pharmacology by thanking the speaker for sharing his vast experience and knowledge.

Dr. Matam Vijay Kumar Professor, Director of university of Toledo microbiome consortium Toledo, Ohio delivering lecture to the PGs, PhD scholars and faculty members of Department of pharmacology.

Vice Principal Dr. G. V. Pujar felicitating Dr. Matam Vijay Kumar Professor, Director of university of Toledo microbiome consortium Toledo, Ohio.