

DEUTSCHE PHARMAZEUTISCHE GESELLSCHAFT
LANDESGRUPPE RHEINLAND-PFALZ
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Landesapothekerkammer Rheinland-Pfalz -

Einladung

Dienstag, 14. November 2017, 17.15 Uhr

**Institut für Pharmazie und Biochemie
Seminarraum I (EG) der Pharmazie, Staudingerweg 5**

Herr Prof. Dr. Anupam Bishayee

Department of Pharmaceutical Sciences, College of Pharmacy, Larkin University,

18301 N. Miami Avenue, Miami, FL 33169, USA;

spricht über das Thema:

Anticancer drug development from natural products:

Progress, pitfalls and promise

Abstract:

Approximately 80% of all drugs approved by the United States Food and Drug Administration during the last three decades for cancer therapy are either natural products *per se* or are based on, or mimicked natural products. To lead the search for agents with potential anti-cancer activities, plants and marine organisms can provide valuable direction. These agents have also been studied for cancer preventive and therapeutic properties using preclinical animal models that resemble human cancers. The activity can be explained by multiple cellular and molecular mechanisms, including scavenging of free radicals, detoxification of carcinogens, DNA repair, alteration of cell cycles, programmed cell death, immune surveillance, anti-inflammatory, anti-angiogenic, anti-invasive and anti-metastatic activities as well as their ability to modulate a plethora of dysregulated oncogenic signaling pathways. This presentation aims to present studies on cancer preventive and therapeutic attributes of various medicinal and dietary plants, isolated compounds and analogs with special emphasis on underlying molecular mechanisms, including those reported from our own laboratory. Current limitations, challenges and future directions of research for successful cancer drug development based on natural products will also be discussed.