



# SRI VENKATESWARA COLLEGE OF ENGINEERING

(An Autonomous Institution – Affiliated to Anna University, Chennai)  
Sriperumbudur Tk – 602 117, Tamil Nadu



**Department of Biotechnology**

&  
**BioAcademy**



Solicit your esteemed presence for a Guest Lecture

on

## **“Managing Cancer: From Understanding the Cause to Developing Treatment”**

by



**Dr. Gnanasekar Munirathinam**

**Associate Professor**

**Biomedical Sciences**

**University of Illinois College of**

**Medicine Rockford, United States**

**ALL ARE CORDIALLY INVITED**

Venue : **Google Meet** (<https://meet.google.com/uic-phww-zdt>)

Date : **04<sup>th</sup> November 2022 (Friday)**

Time : **08:00 to 09:00 PM (IST)**

**Conveners**

Prof. M. Sivanandham  
Secretary, SVEHT

**Organizing Secretary**

Prof. E. Nakkeeran  
HOD-BIO

**Coordinator**

Dr. K. Ganesh Prasath  
AP-BIO





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### Report of the Guest Lecture on "Managing Cancer: From Understanding the Cause to Developing Treatment"

04<sup>th</sup> November 2022

A guest lecture on " **Managing Cancer: From Understanding the Cause to Developing Treatment**" was organized by Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur on 04<sup>th</sup> November 2022 (08.00 to 09.15 PM IST) through Virtual mode. The guest lecture was conducted by Dr. K. Ganesh Prasath, Assistant Professor, Biotechnology with Prof. E. Nakkeeran, Head of the Department, Biotechnology as Organizing Secretary and Prof. M. Sivanandham, Secretary, SVEHT and as Convener.

The session was started with a welcome address by Ms. B. Sadhakshi, III Year, B. Tech Biotechnology and she had introduced the guest speaker **Dr. Gnanasekar Munirathinam, Associate Professor, Biomedical Sciences, University of Illinois College of Medicine Rockford, United States**. The main objective of the Guest Lecture was to provide the impact of cancer management that covers the factors involved in causing cancer and the treatment development.

Participants including UG, PG students and the faculty members from SVCE attended the event with a total of 130. Dr. Gnanasekar Munirathinam discussed the exposure of Cadmium to the Benign prostatic hyperplasia (BPH-1) cells causes tumors in *In vitro* condition and also the exposure causes stemness and increasing expression of Wnt/ $\beta$ -catenin expression at mRNA level in BPH-1 cells. The discussion was also included the effect of clofazimine with extensive anti-tumorigenic and anti-metastatic activities. The lecture was followed by an interactive session and the guest speaker addressed the questions raised by the participants.

The session was concluded with a vote of thanks delivered by Ms. V. Kaaviya, II Year, B. Tech, Biotechnology. The Guest speaker, Dr. Gnanasekar Munirathinam thanked the organizers and the management of SVCE for organizing this event.



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**Snapshots of the Guest Lecture on "Managing Cancer: From Understanding the Cause to Developing Treatment"**

**04<sup>th</sup> November 2022**

**What is cancer?**

- Uncontrolled growth of cells and spreading
- Cancer can form anywhere in the body
- Types of cancer:  
>100 types.  
Carcinoma, Sarcoma, Leukemia, Lymphoma, Multiple Myeloma, Melanoma, Brain and Spinal Cord Tumors

Source: cancer.gov

**Cadmium induces in-vitro tumorigenesis in prostate cells**

Spheroid growth assay:

Condition	500 cells	1000 cells	1500 cells
BPH-1	~10	~20	~30
BPH-Cd	~100	~120	~140

Data are shown as mean ± SD of three independent experiments carried out in triplicate. Significant differences were observed between BPH-1 and BPH-Cd groups (\*\*\*p<0.0001) by ordinary one-way ANOVA. Tukey's multiple comparison statistical analysis.

Prepared by

**Dr. K. Ganesh Prasath, AP/BIO**

Approved by

**Prof. E. Nakkeeran, HOD, BIO**

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