## **Targeting Cancer Metabolism**

5<sup>th</sup>- 9<sup>th</sup> December 2016, Anna University, Chennai.

## **Overview**

Cancer cells differ from normal cells in their ability to acquire nutrients in order to help sustain their rapid growth and differentiation. Cancer cells achieve this energetic need through metabolic reprogramming and altered signaling pathways. A thorough understanding of the metabolism and bioenergetics may help develop targeted therapeutic compounds that can selectively inhibit proliferation or enhance cytotoxicity in cancer cells. This course will cover the basics in cancer biology, normal metabolism, oxidative metabolism and signaling pathways involved in anti-proliferative mechanisms.

The course will provide insights into the fundamental aspects of tumor and normal cell metabolism and bioenergetics and provide new insights into metabolism, redox signaling, and tumor growth. The course would greatly enhance the knowledge on the role of genetic alterations on tumor metabolism and highlight metabolic imaging in oxygen utilization and tumor response to radiation therapy or chemotherapy.

Course participants will learn these topics through lectures. Also assignments will be shared to stimulateresearch motivation of participants.

Dates	Biotechnology : Dec 5 - Dec 9 2016 Number of participants for the course will be limited to fifty.
You Should Attend If	<ul> <li>You are a student (PhD or M.tech), Faculty, Research scholar, Research scientist from Academia/ industry interested in Cancer metabolism, Cancer signalling, Drug targeting, Drug delivery</li> <li>If you are interested in Biochemistry, Molecular Biology, Immunology, Genetics, Special Biology or any other Life Sciences.</li> </ul>
No. of Credits	One
Fees	The participation fees for taking the course is as follows: Students: Rs. 2000/- Research Scholars: Rs. 4000/- Faculty and Scientists: Rs. 7500/- Industry/Research Organizations: Rs. 10,000/-
	Mode of payment of fee: Demand draft in favour of "The Director CTDT, Anna University" payable at Chennai. The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges. The participants will be provided with accommodation on payment basis.

## The Faculty



Dr.BalaramanKalyanaramanMS, PhD., Professor and Chairman of the Department of Biophysics and Center for Free Radical Research. His research interests are centered on the application of Biophysical techniques in free radical biology and understanding the role of free radicals in signal transduction and apoptosis in cancer therapy. He is a member of several Commitees and Editorial boards and has published more than 60 publications in peer reviewed journals. He has several NIH grants and has won various awards in his area of research.



Dr. C.D. Anuradha M.Phil., PhD., is HOD & Director, Centre for Biotechnology, Anna University. She obtained her M.Phil and Ph.D. degree in Biochemistry. She has 25 years of research experience in the field of Stem cell Technology, Cancer Therapeutics and Cardiovascular therapy in Germany, Japan and USA. She has more than 40 research articles in International peer reviewed Journals like JBC, PLOS and American Journal of Physiology and has several ongoing research projects .She collaborates with various labs in the UK and USA and has a great passion for research in cell signaling mechanisms.

## **Course Coordinator**

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https://www.annauniv.edu/gian/course.html