

Seminar

World of Eicosanoids, the Regulators of Cellular Homeostasis

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Eicosanoids are the oxygenated metabolites of eicosapolyenoic acids such as arachidonic acid (20:4, w-6), formed via the mono (epo)xygenase (MOX/EPOX), the lipoxygenase (LOX) and cyclooxygenase (COX) pathways in cellular systems. These include hundreds of structurally and stereospecifically diverse oxylipids, often with pro- and anti-inflammatory effects, termed as the autocooids or local hormones, formed tissue specifically in response to variety stimuli and maintain cellular homeostasis. Their uncontrolled production, however is associated with variety of inflammatory disorders, including allergy, asthma, coronary heart diseases, psoriasis, cancer, Alzheimer's disease etc.

In the world of Eicosanoids, oxygen is the currency of information. Cells and tissues regulate the balance of each of these molecules and biological properties, to maintain homeostasis successfully despite internal or external disturbances. Understanding these processes will provide ways and means of maintaining homeostasis and thus in the treatment of a variety of diseases.

The main focus of our group is on understanding the role of eicosanoids in inflammation and cancer.

Wednesday, Nov 15th 2017

04:00 PM (Tea/Coffee at 03:30 PM)

Auditorium, TIFR-H