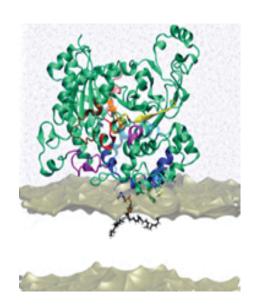


LIPID MEDIATORS IN **HEALTH AND DISEASE II:** From The Cutting Edge

A Tribute to Edward Dennis

Honorary Chair: Nobel Laureate Bengt Samuelsson





7TH INTERNATIONAL CONFERENCE on PHOSPHOLIPASE A₂ and LIPID MEDIATORS: From Bench To Translational Medicine

La Jolla, California May 19-20, 2016

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As a result of the success of the symposium to honor Professor Bengt Samuelsson held at the Nobel Forum, Stockholm, Sweden (August, 2014), we plan to hold a second Lipid Mediators in Health and Disease Conference in 2016. This joint meeting will be combined with, for this time only, the International Conference on Phospholipase A2 and Lipid Mediators. Preceding this event, the final Lipid Maps meeting will be held in the same venue (May 17-18, 2016).

Lipids play a myriad of essential functions in cell organization, energy metabolism, and overall homeostasis. They are also precursors for biosynthesis of potent chemical mediators in the immune system, nervous system (brain, retina, etc.), as well as endocrine. They are paracrine and autocrine signaling pathways and networks with consequent roles in health and the major diseases of our times.

Important categories of lipids include fatty acids, glycerolipids, phospholipids, sphingolipids, sterols, and prenols, and each produce key lipid mediators, including eicosanoids and docosanoids, endocannabinoids, platelet activating factor, sphingosines, steroid hormones, and dolicols. The significance of phospholipase A₂, the key enzyme that initiates the inflammatory cascade by the release of arachidonic acid to generate numerous lipid mediators, as well as other enzymes that cleave lipids has become central to the understanding of the release of precursors of bioactive lipid mediators. Therefore, understanding the regulation of phospholipase expression, structure, and interactions with membrane substrates is contributing to greater insights into their roles in cell function and diseases. Dysregulations in the synthesis, actions and metabolism of these mediators are associated with disease onset, and several very successful drugs emanate from insights into the role of these signaling cascades in pathogenesis. For example, synthetic glucocorticoids are drugs that act against a variety of severe inflammatory conditions, and aspirin, as well as new generations of non-steroidal anti-inflammatory drugs, are effective treatments for pain, fever, and edema. Prostaglandin analogs are used for the treatment of glaucoma and in veterinary medicine; leukotriene synthesis inhibitors are used in asthma; and a synthetic analog of sphingosine is now used for treating multiple sclerosis. Hence, research on lipid mediators is important for the generation of new knowledge on the molecular pathogenesis of human diseases and development of new medicines. The field of lipid mediators is vibrant with a series of recent breakthroughs in basic as well as clinical research and therapeutic opportunities. The mission of this conference is to bring together the world's leading experts in this area for presentations and discussions on cutting-edge topics, exchange of new concepts and technical advances, as well as identification of new paths and strategies for the future.

At this meeting, we wish to celebrate Edward A. Dennis for his seminal contributions to the important fields of Phospholipase A₂ and Lipidomics.

With wishes for a great conference!

Nicolas G. Bazan, MD, PhD, LSUHSC, School of Medicine (New Orleans) USA, Conference Chair

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