Prof. Dr. Rafat Ali Siddiqui:

Indiana University School of Medicine, USA.

Area of Research: Cellular Biochemistry

Dr. Rafat Ali Siddiqui has earned his Ph. D. in 1988 from the Australian National University Canberra Australia under the supervision of Professor John F Williams who is famous for his research on the pentose phosphate pathway

He immigrated to America in 1989 on an invitation from Dr John Exton on a Howard Hughes Medical Institute HHMI fellowship at Vanderbilt University Medical Center, Vanderbilt University, Nashville, Tennessee. He started his research work in the Bone Marrow Transplant Research Laboratory at Methodist Hospital in 1993 where he established his independent research laboratory in 1999. At present He is a Senior Investigator and the Director of the Cellular Biochemistry Research Laboratory at the Methodist Research Institute. He is also serving as an adjunct Professor in the Department of Biology Indiana University, Purdue University Department of Medicine Indiana University Medical School Indianapolis Indiana.

During the course of his scientific career he has developed broad expertise in the life science research area. However, his research is primarily focused to investigate how dietary fats impact diseases particular cardiovascular and cancer. He has developed a very successful research program at the Methodist Research Institute in the area of molecular nutrition.

His published work was included in the top 5 articles in the area of cardiovascular research for the Annual Bibliography of Significant Advances in Dietary Supplement Research 2006 Office of the Dietary Supplements National Institute of Health Bethesda Maryland. He has notable contribution in the cancer area is the development of fatty acids polyphenol conjugates with anticancer properties. This work has also received a worldwide attention.

His current research interests include studies of pulmonary angiogenesis by protein and lipid angiogenic factors and the role of omega-3 fatty acids and polyphenols on cellular processes in cancer and the cardiovascular system. Research in cancer area includes investigation of the effects of omega-3 fatty acids and polyphenols on cancer growth inhibition in various *in vivo* and *in vitro* cancer models.

Recent research is focused on identification of nutritional compounds for inhibition of muscle wasting (cachexia), an atrophic condition often associated with cancer, inflammation, AIDS and other chronic diseases.