Prof. P. Reddanna's Profile

Prof. P. Reddanna has been working for the past 30 years in the area of inflammation and cancer. He has standardized assay methods for lipoxygenase and cyclooxygenases, the target enzymes for the development of anti-inflammatory and anti-cancer drugs, their cloning, expression, purification and characterization. His papers on leukotriene synthesis along with Prof. E.J. Corey, the Nobel Laureate and the discovery of a new pathway for the conversion of Leukotriene C₄ to Leukotriene F₄ are significant contributions. He has shown that Vitamin E inhibits 5-lipoxygenase for the first time. In collaboration with NCL, Pune, he has developed potent lipoxygenase inhibitor. He has provided scientific evidence for "Bronco-T", an Ayurvedic product developed by M/S Surya pharmaceuticals, for the treatment of allergy and asthma. His group has proved that C-Phycocyanin and vitamin-D analogs are selective inhibitors of Cyclooxygenase-2, which induce apoptosis in cancer cell lines. He is the first one to initiate university-industry collaborations and receive the grant from DST under the program of Drugs & Pharmaceuticals (now PDRSF). He has completed two projects for Dr Reddy's Laboratories and one project each to Shantha Biotechnics Pvt. Ltd., Indian Immunologicals (ivermectins), Medgene Biotech, Surya Pharmaceuticals (Bronco T), Pacific Hospital Pvt Ltd., Dabur Research Foundation, Natco Pharma & Laila Impex. He has conducted a DBT- sponsored short-term training course on PUFAs and Eicosanoids, which was attended by representatives from industries, research institutes, corporate hospitals and universities. He has helped Natco Pharma in the development of potent Gleevec analogs for CML. Technologies were developed to improve the shelf life of tomato and custard apple in collaboration with ANGRAU, as part of AP-Netherlands Biotech program. Recognizing these achievements, Chemtech Foundation has awarded the "Pharmabio Excellency Award" in 2005, Royan International Foundation, awarded the "Royan Best Researcher Award" in 2007 and Federation of Andhra Pradesh Chambers of Commerce and Industry (FAPCCI)

He has published around 150 papers in peer reviewed journals; Guided 30 students for Ph.D. and trained more than 100 students for M. Sc. Projects. Already completed 20 projects funded by Government agencies like DST, DBT, CSIR, UGC and ICMR, International agencies. He also has undertaken projects from leading Pharma and biotech companies like Dr.Reddy's Labs, Dabur Research Foundation, Indian Immunologicals, Shantha Biotech, Natco Pharma, Onconova, ABL Technologies, Surya Pharmaceuticals, Celestial Labs, Laila Impex etc.