# ELP1 – a mediator for inflammation induced tumorigenesis

**Suresh K Rayala*and Ganesh Venkatraman [R1]**

Department of Biotechnology, IIT Madras, Chennai-600 032
*E-mail: rayala@iitm.ac.in*

## Abstract

Tissue inflammation happens either due to injury or microbial infection. In most cases, once the underlying cause is addressed, inflammation resolves. However, in certain cases with a few confounding factors, the inflammation persists. So we asked the question whether, chronic inflammation in tissues trigger neoplastic transformation. So far only anecdotal references of genes/proteins/pathways have been listed. Our recent work presents a direct mechanistic link on appropriate in vitro, in vivo model systems with several clinical evidences and show that a nuclear regulator protein PELP1 mediates the process of transformation of epithelial cells by regulating paracrine secretion of a cytokine, GM-CSF. Our work holds good translational implication if we are able to break this nexus.

Key words: PELP1, GM CSF, Chronic inflammation, tumorigenesis