Regulation of inflammation time axis at RNA level

Yoko Tanaka-Watanabe, Hiroshi Asahara

Tokyo Medical and Dental University, Tokyo, Japan, and CREST, JST.

ABSTRACT
Chronic inflammation causes many diseases, including arthritis and autoimmune diseases, however, precise molecular mechanisms how termination of inflammatory response is disturbed remains unclear. Here we will address this question by examining the role of microRNA in inflammation and arthritis pathogenesis. We analyzed miRNA profiling of cell lines and human tissues using next generation sequencer. It will uncover a novel molecular cascade regulating inflammatory time signals at RNA level. This may provide novel targets or strategies for inflammatory diseases, such as rheumatoid arthritis.