

Translational Research Series

Seminar IV

Cyclic GMP-mediated signalling: getting to the gut of the matter

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Seminar Hall

At 3.00 pm on 24th September, 2013



Seminar IV

Cyclic GMP-mediated signalling: getting to the gut of the matter

Abstract

All disease begins in the gut'. This perceptive observation by Hippocrates is in harmony with the realization, today, of the importance of gastrointestinal function in the general well being of any living organism. The intestine is the primary site of nutrient absorption, fluid-ion secretion, and home to trillions of symbiotic microbiota. The high turnover of the intestinal epithelia also renders it susceptible to neoplastic growth. These diverse processes are carefully regulated by intricate signalling networks. This talk will focus on a receptor guanylyl cyclase and the role of cGMP in modulating gut physiology. From a molecular understanding of the biochemical regulation of this receptor, we have moved towards delineating its roles in regulating intestinal cell proliferation, and origins of gastrointestinal disease.

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