conferenceseries.com

Global summit on

OBESITY, DIET AND NUTRITION

January 18-19, 2021 Webinar

Molecular crosstalk amongst anti-orexigenic ghrelin and adenosine monophosphate-Activated Protein Kinase(AMPK)

Miss Akanksha Singh
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Ghrelin has proved to be a crucial mediator in stimulation of obesity. It elevates appetite by eliminating the action of GHS-R1a of neurological NPY/AgRP thus enhancing orexigenic activity. Such negative effects had been neutralized by the production of auto-ghrelin antibodies which are self-catalytic neutralizing the obese conditions by directly targeting AMPK active site which is known to stimulate appetite. Suppression of AMPK thus playing a central role might eliminate the activation of GHS-R1a thus leading to controlled release of ghrelin hormone. In this study, when mice were fed with high calorie diet exposed to the anti-ghrelin antibodies prepared by ELISA technique, after few hours, anti- ghrelin showed maximum activity thus decreasing ghrelin levels originally present. The aim of this study was to determine the genetic interaction between AMPK and anti-ghrelin thus ultimately targeting obesity.

Biography

Akanksha Singh is a budding biotechnologist currently works as a project associate in CSIR-NEERI, Nagpur. She has completed her post-graduation in Biotechnology from RTMNU, Nagpur. Her research interest includes molecular biology and obesity. She has worked on 2 research papers and also published her abstracts “CRISPR mediated ATR activity in Oncological cells” in Journal of Cellular and Molecular Biology Research,2020 at 2nd Annual Congress on Cellular Therapies, Cancer, Stem cell and Biomedical Engineering, July 18, 2020, Vienna, Austria and “Interaction of Obese FTO gene with CRISPR-Cas 9 system”, Journal of Cellular and Molecular Biology Research, Genetics and Molecular biology Webinar 2020, September 24, 2020, Paris, France.

akankshaasingh1998@gmail.com

Notes: