CENTRE FOR BIOINFORMATICS PONDICHERRY UNIVERSITY **PUDUCHERRY**

June 27, 2019

Invited Talk On

"Adipogenesis in Health and Disease, and Treatments"

Dr. Kameswara Rao Badri, Assistant Professor, Department of Pharmacology and Toxicology (Morehouse, School of Medicine) Atlanta, USA will give an invited talk on the above mentioned topic at Centre for Bioinformatics, Pondicherry University to the Faculty, Research Scholars and Students.

All are cordially invited to attend the lecture and benefit.

Date: July 01st (Monday), 2019

Time: 12.00 PM

Venue: Seminar Hall, Centre for Bioinformatics, PU

Abstract:

Obesity rates are rising globally, with 1.5 billion overweight and 500 million obese worldwide. According to The Centers for Disease Control and Prevention, almost 2/3rds of the United States population is either overweight or obese. Growing obesity rates in children and adolescents makes the obesity pandemic more alarming and solutions more critical. Obesity increases the risk for insulin resistance, diabetes mellitus, dyslipidemia, hypertension, sleep apnea, cardiovascular disease and certain types of cancer. Only limited obesity management options are available, including lifestyle modification, behavioral interventions and invasive surgeries. Adipose tissue includes white fat/adipose tissue (WAT) and brown adipose tissue (BAT), both endocrine organs that contribute to systemic metabolic regulation. Understanding adipocyte differentiation of WAT and BAT has many implications for understanding metabolic health and diseases. Various cellular events/factors, including transcriptional factors and cofactors, regulate mesenchymal stem cell commitment and the differentiation of progenitor cells into preadipocytes and adipocytes. We reported that P311 regulates blood pressure and vascular contractility (Badri et al. JCI 2013). P311 is a new protein recently shown to be involved in adipogenesis, partly mediated through regulation of PPARy2, master regulator of adipogenesis, activation. The novel concepts prposed may lead to breaking new ground and expanding previous discoveries to establish the key role of P311 in adipogenesis and the pathophysiology of obesity. Only a limited number of FDA approved drugs are available to treat obesity. Our research will lead to understanding the biology of P311 and developing P311- targeted therapeutics to prevent and /or treat obesity.

Seminar CoordinatorUTHA

Assistant Professor Centre for Bioinformatics Pondicherry University Puducherry - 605 014, India

To - The Systems Manager- With request to host in website

Dr. A. Dinakara Rao (Centre II-

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