
PABLO M. GARCIA-ROVES

CV

PARTICIPANT AT:

FUTURE TOOLS FOR BIOMEDICAL RESEARCH. IN VITRO, IN SILICO AND IN VIVO DISEASE MODELING

**October, 1st-2nd, 2015, Barcelona**

Pablo Miguel Garcia-Roves, Associate professor, Department of Physiological Sciences II, University of Barcelona, Barcelona, Spain

For more than a decade my research is focusing in the elucidation of the mechanisms that control energy metabolism in skeletal muscle and more recently as an integrative approach to whole body energy metabolism. During my PhD and post-doctoral periods I have been trained in Nutrition, Energy Metabolism and Integrative Physiology research areas. I have experience participating in human studies, mainly during my years as a PhD student. Most of my work has been conducted using animal models, both rats and mice. In these studies we have used gene therapy approaches, dietary and pharmacological interventions and exercise protocols. Biochemical, molecular biology, genetics and in vivo analysis are regularly used. My current research focused on a systemic perspective of the etiology and potential treatments of metabolic diseases (system biology approach). For this purpose functional parameters, metabolism, genetics, epigenetics and proteomics platforms should be used and a wide range of bioinformatics tools should be implemented for the mapping, combination and integration of datasets.

B-DEBATE IS AN INITIATIVE OF:



PABLO M. GARCIA-ROVES

 ABSTRACT

PARTICIPANT AT:

FUTURE TOOLS FOR BIOMEDICAL RESEARCH. IN VITRO, IN SILICO AND IN VIVO DISEASE MODELING

**October, 1st-2nd, 2015, Barcelona**

Pablo Miguel Garcia-Roves, Associate professor, Department of Physiological Sciences II, University of Barcelona, Barcelona, Spain

Systems Biology: Metabolic Plasticity in Chronic Degenerative Diseases

One of the major concerns in health care is the growing prevalence of metabolic disorders. Therefore, major research efforts are focused on the identification of potential targets for new drug development and/or treatment strategies (nutritional interventions and physical activity programs) that help to combat the growing incidence of metabolic diseases such as obesity-related type 2 diabetes. Obesity-related type 2 diabetes is a multi-organic disease by means that many tissues play an important role in the early development of insulin resistance and the later onset of the disease. In this context our work ambition to develop broad, systems-biology approaches devoted to integrate information from different areas of investigation (phenotype data, functional data, signalling and -omics) to supply new insights and a better understanding of the integrated mechanisms that regulate whole body energy metabolism during physiological and pathophysiological states.

B-DEBATE IS AN INITIATIVE OF:

