



UNIVERSITÀ  
DEGLI STUDI  
DI PALERMO

***Dottorato di Ricerca in Biomedicina e Neuroscienze***

*Coordinatore: Prof. Giovanni Zummo*

Sede Amministrativa: Dipartimento di Biomedicina Sperimentale e Neuroscienze Cliniche

## AVVISO DI SEMINARIO

**Martedì 30 Luglio 2013, ore 10:00**

Aula "E. Nesci", Sezione di Anatomia Umana

Dipartimento di Biomedicina Sperimentale e Neuroscienze Cliniche

Via del Vespro 129, Palermo

**Nicola Abate, M.D.\***

Distinguished Professor of Internal Medicine

Chief of the Division of Endocrinology

University of Texas Medical Branch, Galveston (TX), U.S.A.

## METABOLIC DETERMINANTS OF INSULIN RESISTANCE

**Abstract.** Obesity and truncal/abdominal fat distribution, as manifested by increased waist circumference is a major determinant of insulin resistance and its metabolic complications. However, many patients may have insulin resistance even in absence of obesity. On the other end, not all obese patients have insulin resistance. This observation does not diminish the role of adipose tissue in the pathogenesis of insulin resistance, but rather underscores the discordance between adipose tissue mass and function. Growing evidence supports the view that adipose tissue dysfunction is more directly linked to the pathogenesis of insulin resistance than the mass of adipose tissue or its distribution. We present evidence from studies on ENPP1 to support the role of defective adipocyte maturation and triglyceride storage as a main contributor to abnormalities of lipid and glucose metabolism that are typical of systemic insulin resistance and the metabolic syndrome. Better understanding of the mechanisms leading to defective adipocyte maturation and adipose tissue dysfunction is likely to provide us with novel approaches to more precisely identify and treat patients at risk for the metabolic syndrome and its chronic disease complications, such as type 2 diabetes mellitus and cardiovascular disease.

### \* Brief biosketch:

2008-present	Professor of Medicine (Tenure), University of Texas Medical Branch, Galveston, Texas.
2008-present	Chief, Division of Endocrinology, University of Texas Medical Branch, Galveston, Texas.
2008-present	Charles Sprague, M.D. Distinguished Professorship in Internal Medicine.
2008-present	Clinical Associate Professor of Medicine, UT Southwestern Medical Center at Dallas.
2009-present	Fellow of the National Lipid Association.
2011-present	Senior Research Staff, Shriners Hospitals for Children Galveston.
2006-present	Associate Editor "Metabolic Syndrome and Related Disorders".
2006-present	Member for the Editorial Board for the Journal of Clinical Lipidology
2013-present	Member Editorial Board of Global Epidemic Obesity
2011-present	Member of the editorial board "Diabetes Care".
2013-present	Permanent member NIH-CIDO study section.



In cooperazione con:



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