

AVVISO DI SEMINARIO



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12:00



Aula C (CU010)

Dipartimento di Scienze Biochimiche

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Alterations of brain energy metabolism in insulin resistant diabetes

Abstract. The increasing prevalence of type 2 diabetes (T2D) in western societies is closely associated with obesity, sedentary life-styles and the excessive consumption of food products rich in fat and sugar. The whole-body metabolic imbalance in diabetes has a detrimental impact on brain function, leading to increased risk of dementia. Our lab focuses on understanding early metabolic dysfunction that might precede and be involved in the diabetes-induced neurodegenerative process. This lecture will cover our recent research on animal models of T2D, revealing alterations of energy metabolism in neurons and astrocytes caused by insulin resistance. It will also be discussed whether the loss of metabolic regulation in these brain cells can lead to synaptic dysfunction and memory impairment. Furthermore, I share recent experiments on neuroprotective strategies that can rescue brain function in T2D.





