



UNIVERSITÀ
DEGLI STUDI
DI PALERMO

**Dottorato di Ricerca Internazionale in
BIOMEDICINA, NEUROSCIENZE E DIAGNOSTICA AVANZATA**

(PhD Course in Biomedicine, Neuroscience and Advanced Diagnostics)

Coordinatore: Prof. Fabio Bucchieri

AVVISO DI SEMINARIO

Venerdì 17 Dicembre, ore 15:30

Aula E. Nesci, Istituto di Anatomia Umana, Policlinico, PA

Meeting Link: <https://fluorite.webex.com/fluorite-it/j.php?MTID=m7b5d26868fc262342bda57e15f51bc3b>

Meeting Password: ByD9nb32trZ

CARLA NASCA, PhD

NYU School of Medicine, New York

NOVEL EPIGENETIC MECHANISMS OF NEUROPLASTICITY IN STRESS RESPONSES AND PSYCHIATRIC DISORDERS

Summary: At NYU School of Medicine, Dr. Nasca lab is working on an innovative framework of epigenetic mechanisms of neuroplasticity to stress. Key to this framework is the pivotal mitochondrial metabolite L-acetylcarnitine (LAC), which she discovered as a novel epigenetic modulator of hippocampal plasticity and a therapeutic target for clinical endophenotypes of depression associated with childhood trauma. Using exosome technology, her group further showed that modulating mitochondrial metabolism of LAC is predictive of changes in other important aspects of human physiology, such as insulin resistance. We hope this new knowledge can ultimately lead to neuroscience-based personalized medicine strategies for stress-related diseases, including depression.

Bio: Dr. Nasca is a professor in the Departments of Psychiatry and Neuroscience at NYU School of Medicine in New York. She joined NYU after directing her own research group at Rockefeller University where she previously trained in Neuroscience with Bruce McEwen. Dr. Nasca conducted her Ph.D. studies at Sapienza University (Rome), and she received her master's degree from the University of Palermo. Dr. Nasca received numerous federal and foundation research grants, including the High Priority research grant from National Institute of Mental Health (NIMH) and the Falk Transformative Research Award. She also is a recipient of the Blavatnik Award for Innovative Research.