

Mercoledì 26 giugno 2013

ore 16.00

Sala Azzurra

Palazzo della Carovana

Piazza dei Cavalieri

# Colloqui della Classe di Scienze

Anno Accademico 2012/2013



SCUOLA  
NORMALE  
SUPERIORE

SCUOLA NORMALE  
SUPERIORE

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*Genes, the origins of cancer  
and pursuit of new therapies*

### ABSTRACT

Advances in molecular biology have allowed us to understand the structure-function relationship of genes and of proteins and their abnormal counterparts in human diseases such as cancer, inflammatory disease and neuropathies. We now understand a great deal about the genetic changes that underlie the origins of cancer and the subsequent milieu of mutations that characterize overt cancer but the translation of this knowledge into new therapies has been difficult. This is partly because cancer cells exploit many features of normal biology to extend longevity and evade drug treatment but also because perfecting drugs for intervention requires many layers of interaction between biologists, chemists and physicians that present practical difficulties. In our laboratory, we have been attempting to circumvent these limitations by creating a microcosm for developing new methods for drug target identification, through target validation to drug discovery. I will discuss some of this work in the context of our aim to employ molecular biology for improved treatment options for patients.