



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

DIPARTIMENTO  
DI FARMACIA  
E BIOTECNOLOGIE

## AVVISO DI SEMINARIO

Il giorno **30 aprile 2025**  
alle ore **12.00**

**Prof. Angelo Lombardo**

Università Vita-Salute, San Raffaele Milano  
(ospite del Prof. Giovanni Perini)

terrà un seminario in lingua inglese

### **Programming permanent gene repression by epigenetic editing**

Area tematica: Technologies for gene therapy

*in presenza:*

**aula Carinci, via Belmeloro 9, Bologna BO**

*e in streaming:*

<https://teams.microsoft.com/l/meetup-join/19%3aN09c0NlyEssBnF7ObCyDOQwkgDWm1qdd9f7F2nJV9fw1%40thread.tacv2/1631519544944?context=%7b%22Tid%22%3a%22e99647dc-1b08-454a-bf8c-699181b389ab%22%2c%22Oid%22%3a%225a941351-ef41-4aa4-8771-fa50a6d62ca1%22%7d>

Colleghi e studenti sono cordialmente invitati

## **ABSTRACT**

Epigenome editing is emerging as a powerful strategy to silence gene expression without altering the primary DNA sequence. In this context, we and others have demonstrated that the transient delivery of epigenome editors (epi-editors) can induce efficient, long-term, stable, and specific epigenetic silencing of endogenous genes in human and mouse cells—and, more recently, in mice and non-human primates. Epi-editors are chimeric proteins composed of a programmable DNA-binding domain, such as CRISPR-Cas9 or ZFPs, fused to one or more effector domains derived from naturally occurring epigenetic repressors. During my talk, I will present our efforts to refine and characterize this technology, with a focus on its in vivo and ex vivo applications for the treatment of monogenic and acquired diseases.

## **BIOGRAPHICAL SKETCH**

Angelo Lombardo is a Professor of Tissue Biology and Regenerative Medicine at Vita-Salute San Raffaele University (UniSR; Milan, Italy), and a Group Leader at the San Raffaele-Telethon Institute for Gene Therapy (SR-Tiget; Milan, Italy). He is also a co-founder of nChroma Bio. (Boston, MA, USA). His research focuses on the development and application of innovative gene therapy technologies, including genome and epigenome editing. Throughout his career, Angelo has published over 40 articles in peer-reviewed journals, including *Cell*, *Nature*, *Nature Biotechnology*, and *Nature Methods*. He is an inventor on several patent applications related to his work and has received numerous prestigious international awards, including the Young Investigator Award and the Excellence in Research Award from the European Society of Gene and Cell Therapy.