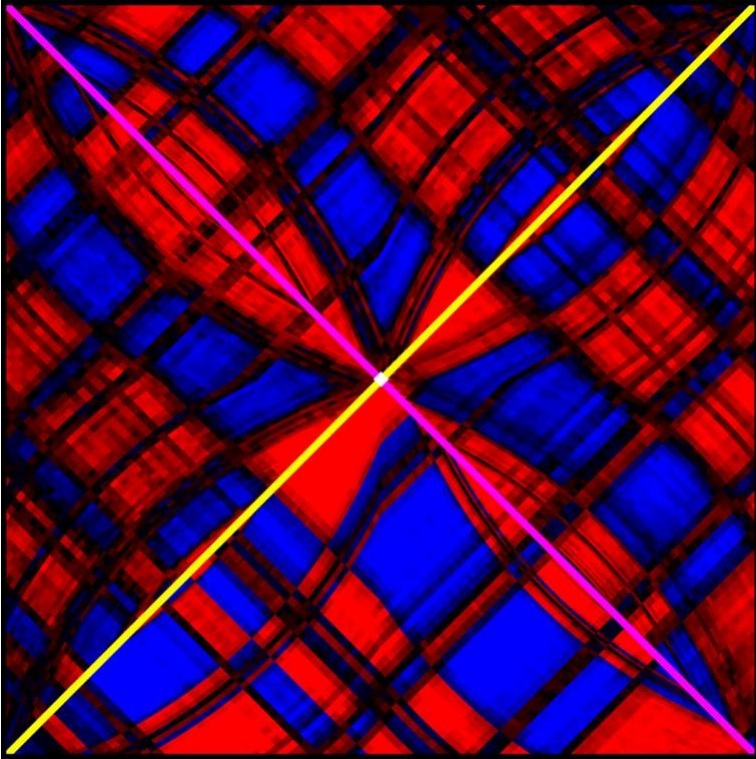

THROUGH THE LOOKING GLASS SEMINAR SERIES

SYNTHETIC PHYSIOLOGY LAB @ UNIPV



Prof. Alessandro Bertero
Department of Molecular
Biotechnology and Health
Sciences, University of Turin

Functional dynamics of chromatin topology in the human heart

Recent technological advancements in the field of chromatin biology made us appreciate that the folding of chromatin in three-dimensional space is non-random, hierarchical, and highly complex. Nevertheless, functional changes in spatial genome organization during human development or disease remain poorly understood. We have investigated these dynamics during the differentiation of healthy human pluripotent stem cells into cardiomyocytes in pathophysiological conditions. We probed nuclear structure, chromatin accessibility, gene expression, genetic perturbations, and cardiac physiology in engineered in-vitro assays. In this seminar, I will summarize our published findings and present novel preliminary data on the methods we are developing to probe the structure-function relationship of chromatin in the human heart.

Meeting details:

Date: Apr 13th, 2023

Time: 2:00 PM

Location: Aula EF3