

Monday, September 12, 2022, 4 PM ET BSRB, ABC Seminar rooms (Hybrid)

RNA Structures, Interactions and Modifications



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Abstract

RNA in living cells are in constant motion, form dynamic structures, and interact with many molecules, including other RNAs. Direct determination of RNA structures and interactions in vivo is essential to understanding their functions, but has been challenging in the past. We developed a number of novel chemical and computational tools to capture the 2D and 3D RNA structurome and interactome in cells, providing a comprehensive view of RNA conformations that underlie their roles in gene regulation and human diseases. Applications of these methods revealed new mechanisms in lncRNA functions, RNA modifications and splicing regulation.

