



Image Source: National Institutes of Health

Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Lurie Cancer Center's Basic Research Seminar Series

Decrypting the Epitranscriptomic Code in Cancer

Tuesday, October 25, 2022

11:00 a.m.- 12:00 p.m. CT

Baldwin Auditorium, 1st Floor

Robert H. Lurie Medical Research Center
303 E. Superior St., Chicago, IL

The Arango lab works to unravel the molecular mechanisms by which post-transcriptional modifications of RNA regulate mRNA processing, stability, and translation and how this interplay affects cell fate decisions in homeostasis and disease. With more than 150 ribonucleotide modifications in all classes of RNA, the epitranscriptome has become a crucial regulatory layer of gene expression regulation. Although the vast diversity of RNA modifications entails an immense regulatory potential, deciphering the epitranscriptome is an enormous scientific challenge. Yet, its decryption will reveal fundamental aspects of gene expression regulation during normal metabolism and disease, which can potentially be leveraged for therapeutic applications. This seminar will focus on Dr. Arango's recent findings that acetylation of cytidines in mRNA regulate translation in a position-specific manner and his laboratory's ongoing studies to determine the mechanisms by which the RNA acetyltransferase enzyme NAT10 promotes cell proliferation and cancer growth.



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