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MASTER'S THESIS PRESENTATION

An empirical testing for overdispersion in the cell-type-specific analysis of Alternative Polyadenylation (APA)

WHEN
February, 23, 2022
1:30 PM, CST

WHERE
Via ZOOM
ZOOM information will be provided in the email announcement for this seminar.

Seung-Wan Jin, MS candidate

Alternative polyadenylation (APA) is a gene regulatory mechanism that generates diverse protein isoforms during mRNA translation by adding a poly(A) tail at with different 3′ ends. Researchers have found out that it occurs in more than 60% of human genes and its dysregulation is involved in diverse aspects of cancer onset and progression. Here, we present an empirical testing method for overdispersion to identify APA genes. By applying density distribution-based computational methods for APA identification, we verify a parameter-dependent overdispersion behavior under Dirichlet-Multinomial distribution.

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