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UNIVERSITY

MOLECULAR MEDICINE AND GENETICS

George E. Palade Award and Distinguished Lecture

Tuesday, September 25, 2018

11:00 a.m. in the Green Lecture Hall, Scott Hall

David Baltimore, PhD



**President Emeritus and the Robert Andrews Millikan Professor of Biology
California Institute of Technology**

Dr. Baltimore is former President of Rockefeller University; Founding Director of the Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology; Co-recipient of the 1975 Nobel Prize in Physiology or Medicine; recipient of the National Medal of Science (1999)

“Fine Control of Gene Expression by Retaining Introns”

ABSTRACT

Treatment of cells with proinflammatory stimuli like Tumor Necrosis Factor turns on a gene program that greatly alters the cells' properties. Central to that program is activation of the transcription factor, NF- κ B. We have shown that although NF- κ B-mediated transcriptional activation happens within 5 minutes of treatment, the induced program activates over many hours and have been investigating the basis of that spread in time. This has led us to realize that the splicing of the pre-mRNA gene transcripts from individual genes is spread out over time and is controlled at least partially by bottleneck introns that are slow to splice. We have found that the splicing of bottleneck introns involves a specific splicing factor and are in the process of understanding its function.

Please contact Suzanne Shaw (sshaw@wayne.edu) for more information