Translational and Transcriptional Control of ATF4

October 4

Tuesday, 12:30pm

Hybrid: Rosedale Room and Zoom

For Researchers

Speaker:

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Host: Rajiv R. Ratan, M.D., Ph.D.

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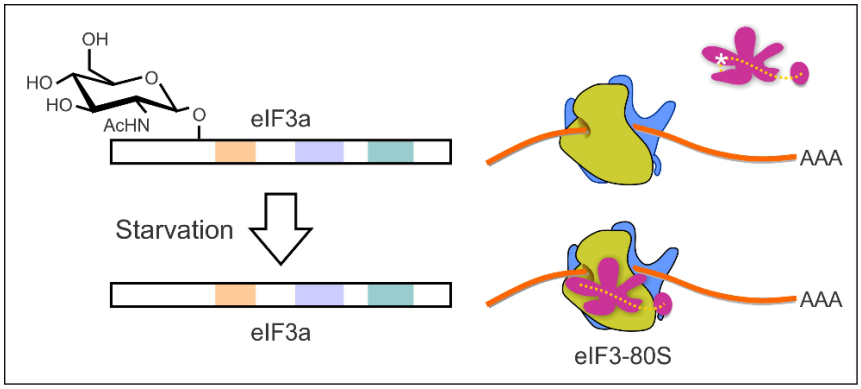
Abstract

Most of the research work in Dr. Qian's laboratory is broadly interdisciplinary, with a primary emphasis on mRNA translation, nutrient signaling pathway, and stress response. Using deep sequencing approach, the Qian laboratory investigates transcriptional and translational control of stress gene expression in mammals. We are also interested in deciphering RNA regulatory logic using massively paralleled reporter assay. More recently, we are exploring intracellular nutrient reprogramming and the implications in pathophysiology of human diseases.



1. Shu XE, Mao Y, Jia L, Qian SB. **Dynamic eIF3a O-GlcNAcylation controls translation reinitiation during nutrient stress.** Nat Chem Biol 2021; 18(2): 134-141.

2. Dong L, Mao Y, Zhou A, Liu X, Zhou J, Wan J, and Qian SB. **Relaxed initiation pausing of ribosomes drives oncogenic translation.** Sci Adv 2021; 17;7(8):eabd6927.

3. Jia L, Mao Y, Ji Q, Dersh D, Yewdell JW, Qian SB. **Decoding mRNA translatability and stability from the 5'UTR.** Nat Struct Mol Biol 2020; 27(9):814-821.