



Discovery Science
Emerging Scholars Lecture

“Multiple Signaling Pathways Link Collided Ribosomes to Cellular Stress Responses”



Ribosomes pause upon encountering problems during translation and collide with each other, forming “disome” complexes. Accumulation of disomes is linked to diseases, but how disomes are detected and affect cellular homeostasis is not fully understood. By developing high-throughput sequencing methodologies, we showed that disomes are detected by multiple pathways, including the Integrated Stress Response, which is a major signaling network in eukaryotes induced by environmental stress and pathological conditions. We also found that disome-induced signaling contributes to an antioxidant response during oxidative stress. Our results show that disomes act as signaling platforms to link translation distress into cellular stress responses.

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Tuesday
November 29, 2022
4:00 pm CT
1220 MRB III

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This lecture series features the most promising young scientists who are making notable discoveries as postdoctoral fellows or early career faculty.

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