



TARA

Life Science Center of
Tsukuba Advanced Research Alliance

TARA Seminar

15:00~16:30, Fri. July 8th, 2016

Seminar room, Building A, TARA Center

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Studying the structure and function of subnuclear 'paraspeckle' bodies: new insights into neurodegeneration, stress and cancer

Paraspeckles are subnuclear bodies found in mammalian cells. They are dynamic RNA-protein structures formed by the interaction between a long non-protein-coding RNA species and several RNA-binding proteins. Paraspeckles are involved in the control of gene expression through a number of different mechanisms. Here, I will present data showing that paraspeckles are induced with stress and help cells resist stress, which may be linked to their up-regulation in cancer. I will also show how many RNA-binding proteins that are mutated in the neurodegenerative disease amyotrophic lateral sclerosis (ALS, also known as motor neuron disease) are critical for paraspeckle formation, and discuss implications for understanding the pathobiology of ALS.

Organizer; Eszter Toth

Prof. Akiyoshi Fukamizu <akif @ tara.tsukuba.ac.jp>

