

SFB 960-/BZR – Kolloquium

22. November 2016, 17.00 Uhr
H53

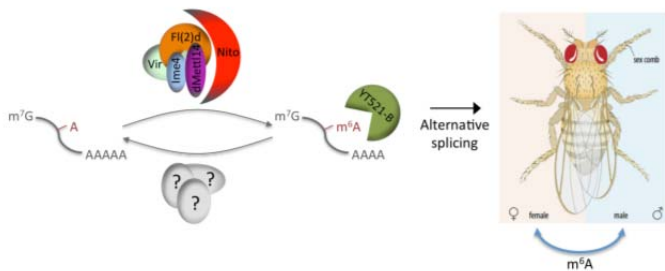


Dr. Jean-Yves Roignant

Institute of Molecular Biology, Mainz

Roles and regulation of m⁶A RNA modification in flies

N⁶-methyladenosine RNA (m⁶A) is a prevalent mRNA modification in vertebrates. While its functions in the regulation of posttranscriptional gene expression are beginning to be unveiled, the precise roles of m⁶A during development of complex organisms remain unclear. We have carried out a comprehensive molecular and physiological characterization of the individual components of the methyltransferase complex as well as of the YTH nuclear reader protein in *Drosophila melanogaster*. We identified the member of the split ends protein family, Spenito, as a novel bona fide subunit of the methyltransferase complex. We further demonstrated important roles of this complex in neuronal functions and sex determination, and implicate the nuclear YT521-B as a main m⁶A effector in these processes. Altogether, our work substantially extends our knowledge on m⁶A biology, demonstrating the crucial functions of this modification in fundamental processes within the context of the whole animal.



Host: Jan Medenbach
Biochemistry I
Jan.Medenbach@ur.de



Universität Regensburg
Biochemie-Zentrum Regensburg

