

【Abstract of 2009 Grant – in – Aid for Scientific Research on Innovative Areas  
(Research in a proposed research area)】

<b>Title of project</b>	Functional machinery for non-coding RNAs
<b>Head Investigator Name</b>	TOMARI Yukihide, The University of Tokyo, Institute of Molecular and Cellular Biosciences, Associate Professor
<b>Abstract of Research Project</b>	Recent studies have uncovered numerous non-coding RNAs (ncRNAs), which account for large proportion of eukaryotic transcriptomes. Although ncRNAs are important for many biological events, it remains unknown exactly how they function in our cells. Most of ncRNAs do not work by themselves, but rather act as components of effector ribonucleoprotein complexes together with protein counterparts. To elucidate the biological roles of ncRNAs, we focus on the ncRNA effector complex and its action, which we collectively designate as “ncRNA functional machinery”. Our goal is to understand the molecular basis, regulatory mechanism, and physiological function of ncRNA functional machinery. In addition, we promote clinical application of ncRNAs based on understanding of ncRNA functional machinery.
<b>Term of Project: 2009–2013</b>	