

【Abstract of 2008 Grant – in – Aid for Scientific Research on Innovative Areas
(Research in a proposed research area)】

Title of project	Systems molecular ethology to understand the operating principle of the nervous system
Head Investigator Name	Yuichi Iino
Abstract of Research Project	This project aims at understanding the basic mechanisms of animal behavior. To do this precisely, we utilize simple model organisms. By using these organisms, we will identify cells, synapses and neural circuits important for specific behaviors. We will then observe the dynamics of important molecules in living animals. To solve the problems in an integrative manner, a new research field will be formed by fusion of different disciplines including behavioral genetics, molecular imaging and mathematical science. By combined efforts of researchers in the combined field, we will
Term of Project: 2008–2012	understand the principles of elementary behaviors such as learning and memory, sensory integration, behavioral decision and alternating movements.