

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

<b>Title of project</b>	Intracellular logistics: interdisciplinary approaches to pathophysiology of membrane traffic
<b>Head Investigator Name</b>	Tamotsu Yoshimori
<b>Abstract of Research Project</b>	Inside cells, membrane traffic, the transport system interconnecting organelles, forms a network of material flow. The network is highly regulated and fine-tuned depending on the time and situation, which is reminiscent of logistics, a concept in industry defined as the management of the flow of goods between the point of origin and the point of consumption in order to meet the requirements of consumers. Recent studies have unraveled that “intracellular logistics” is critical to various biological functions, and that its failure could cause diverse diseases. We aim to understand the linkage of intracellular logistics to the diseases by taking multiple approaches including cell biology, informatics/engineering, and chemical biology to provide knowledge useful for clinical medicine.
<b>Term of Project: 2008–2012</b>	