

Researcher's profile

Name : Tyuji Hoshino, PhD

Affiliation & Title : Associate Professor, Graduate School of Pharmaceutical Sciences, Chiba University

Brief history

1993 Research Associate, School of Science and Technology, Waseda University

1996 Lecturer, Faculty of Pharmaceutical Sciences, Chiba University

2007 Associate Professor, Graduate School of Pharmaceutical Sciences, Chiba University

Main projects : Computational science for bio-physical chemistry, Development of antibody in silico maturation technique, Development of HIV inhibitors

Short summary :

We perform computational studies to enhance the drug discovery. Several software programs have been developed, based on the original algorithm to estimate the binding affinity between a drug and its target protein. Our program is applied to the design of high-affinity monoclonal antibody or HIV inhibitors. Bio-chemical experiments are carried out to express and purify the designed antibody for the evaluation of the efficacy of the antibody. Organic synthesis is also performed to produce the designed compound for anti-HIV drugs and estimate the inhibitory activity.