

## Research on Insecticide Detoxification Enzymes at UC Davis

派遣国名 : United States of America  
受入機関 : Laboratory of Pesticide & Biotechnology, University of California at Davis  
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I had been at Department of Entomology, University of California at Davis (UC Davis) for two month (see the attached pictures). I had joined a Laboratory of Pesticide & Biotechnology organized by Professor Bruce D. Hammock at the same department. He is a member of the National Academy of Science, and his lab contains 40 researchers such as students, postdoc, visiting scientists and staffs. The lab focuses on three areas including insect biochemistry, mammalian enzymology and analytical chemistry, and has produced over 700 publications on these areas. In the lab, I had studied on control pest insect populations by searching biological targets such as the insect endocrine system and chemical approaches such as insecticides.



A major problem with the use of chemical insecticides is the development of resistance. One of insecticide detoxification enzymes, epoxide hydrolase, can be used as targets of high throughput assays for the detection of insecticide resistance. Thus, I tried to find the substrate specificity of the enzyme.



I am grateful to Dr Aso and co-workers for allowing to attendance and research there. I am thankful to the JSPS Program for support of this visit.