

Thesis  
entitled  
**THE STUDY OF FLAVIVIRUS INDUCED REACTIVE OXYGEN  
SPECIES (ROS) PRODUCTION IN MICROGLIA CELLS**

.....  
Mr. Lattapon Suwanprinya  
Candidate

.....  
Assoc. Prof. Noppawan Phumala Morales,  
Ph.D. (Pharmacology)  
Major advisor

.....  
Mr. Ronald Enrique Morales Vargas,  
Ph.D. (Medical Entomology)  
Co-advisor

.....  
Miss. Pimtip Sanvarinda  
M.D., Ph.D.  
(Pharmacology and Toxicology)  
Co-advisor

.....  
Assoc. Prof. Tamaki Okabayashi,  
Ph.D. (Immunovirology)  
Co-advisor

.....  
Prof. Banchong Mahaisavariya,  
M.D., Dip Thai Board of Orthopedics  
Dean  
Faculty of Graduate Studies  
Mahidol University

.....  
Assoc. Prof. Nathawut Sibmooh,  
M.D., Ph.D. (Pharmacology)  
Program Director  
Master of Science Program in  
Pharmacology  
Faculty of Science  
Mahidol University

Thesis  
entitled  
**THE STUDY OF FLAVIVIRUS INDUCED REACTIVE OXYGEN  
SPECIES (ROS) PRODUCTION IN MICROGLIA CELLS**

was submitted to the Faculty of Graduate Studies, Mahidol University  
For the degree of Master of Science (Pharmacology)  
on  
September 19, 2014

.....  
Mr. Lattapon Suwanprinya  
Candidate

.....  
Lt. Col. Asst. Prof. Jeeranut Tankanitlert,  
Ph.D. (Pharmacology)  
Chair

.....  
Mr. Ronald Enrique Morales Vargas,  
Ph.D. (Medical Entomology)  
Member

.....  
Assoc. Prof. Noppawan Phumala Morales,  
Ph.D. (Pharmacology)  
Member

.....  
Assoc. Prof. Tamaki Okabayashi,  
Ph.D. (Immunovirology)  
Member

.....  
Miss Pimtip Sanvarinda,  
M.D., Ph.D.  
(Pharmacology and Toxicology)  
Member

.....  
Prof. Banchong Mahaisavariya,  
M.D., Dip Thai Board of Orthopedics  
Dean  
Faculty of Graduate Studies  
Mahidol University

.....  
Prof. Skorn Mongkolsuk,  
Ph.D.  
Dean  
Faculty of Science  
Mahidol University