

U n i v e r s i t y	Gifu University	Field of study	Veterinary Science
Courses to form the Program	The United Graduate School of Veterinary Sciences		
Program Title	Evaluation of Environmental Condition based on Ecology and Pathology of Wild Animals		
Program Leader	HIRAI Katsuya	Department/Position	Head of The United Graduate School of Veterinary Sciences
Program Summary	This COE Program aims at evaluating environmental condition based on ecological and pathological investigations of wild animals. In particular, attempts will be made to progress the study area named 'Zoo and Wildlife Medicine', to enhance investigations by connecting with other study areas including ecological and environmental sciences, and to educate graduate students wishing to work in this area.		
Needs and Objectives for the Program	It is generally said that the 21st century is a 'Period for Environment', and the importance for conservation of natural environment encompassing wild animals is being better recognized. In other words, agreement that continuous protection of healthy, natural ecosystem with high diversity is essential for the life of human beings has been settled. The role of the wild animals in this ecosystem is very important from such as academic, educational and resource aspects. In order to keep this natural environment healthy, we need to monitor it from various angles. Diagnostic approach for wild animals from ecology and pathology may be one of the indicators. This study area (Wildlife medicine) is a new field of science and formation of a core center of research and education in this field is in demand.		
Plan for Formation of Research Center	<p>This plan will carry out the following content of research as a center for research and education of wildlife medicine, being divided into the research fields of pathology and of physiology/ecology, while training persons of talent.</p> <ol style="list-style-type: none"> <li>1. Pathological research field <ol style="list-style-type: none"> <li>1) Clarification of pathological mechanisms underlying morbid state in wild animals</li> <li>2) Etiological studies of wild animal disease</li> <li>3) Clarification of etiological mechanisms of morbid state of zoonosis</li> <li>4) Evaluation of environment using endocrine disrupting substances accumulated in wild animals as an indicator</li> </ol> </li> <li>2. Physiological/ecological research field <ol style="list-style-type: none"> <li>1) Studies on reproductive physiology of wild animals</li> <li>2) Establishment of techniques for artificial breeding and medical treatment in reproduction of rare wild animals</li> <li>3) Studies on the genetic mutations of rare wild animals</li> <li>4) Sustainable management of environment based on population dynamics of wild animals</li> </ol> </li> </ol>		
Education Implementation Plan	Training accompanying this formation of center for research and education will be conducted by education in the graduate school. Thus wildlife medicine will be taught in the courses of the graduate school, and providing persons who are able to act in the international society as well as in the country will contribute to development of this area. In concrete terms, subjects such as epidemiology and outbreak prevention of lethal infectious diseases of wild animals, clarification of the cycle and mechanisms underlying zoonosis, population dynamics and conservation/management of wild animals, gene protection of rare species and treatment and rehabilitation of injured wild animals will be given to graduate school students and research and education will be enhanced to the levels equal to possible international collaborations. In addition, such as open courses for public citizen, and workshop to form specialists by training full-fledged members of society will be held.		