

WASHINGTON STATE UNIVERSITY

Agricultural Animal Research Building (College of Veterinary Medicine)

2009 – 11 request:	\$100,000	Project Type:	Program (Research)
Institution Priority:	#17	Project Phase:	Predesign
		Gross Square Ft:	26,379

WSU requests \$100,000 in predesign funds for the Agricultural Animal Research Building. This is an updated capital project, part of a comprehensive plan to meet the long-term space needs of the College of Veterinary Medicine and the School for Global Animal Health.



In previous biennia, this project was part of what was called Phase II of an Animal Diagnostic and Research (Biocontainment) Facility. The original project was a combined research and diagnostics project, supporting rapidly expanding infectious disease research and surveillance programs. Some of the research and diagnostics is to protect the state's food supply, while the goals of others were linked to the development of vaccines against animal diseases that were either of major economic importance or represented significant threats to human health.

A \$25M private grant from the Bill and Melinda Gates Foundation has been received for the global animal health *research* component, and the *disease surveillance and diagnosis* component is now identified as the Global Animal Health Building, Phase II (for which design funds are currently being requested in a separate project request).

To capitalize on the vaccine-related *research* work being conducted in the School for Global animal Health, **a facility is needed in which to house natural animal hosts of the diseases** in question and to test the efficacy of the vaccines themselves.

As a result, the remaining agricultural animal housing/biocontainment component of what was formerly Phase II of the *Animal Diagnostic and Research (Biocontainment) Facility*, has been identified as a separate state funded project termed the *Agricultural Animal Research Building*. **The facility will be designed to house livestock (up to 15 adult cattle and 45 younger animals), and will include an insectary for propagating the invertebrate vectors of viral, bacterial and parasitic diseases such as mosquitoes and ticks.** It will accommodate expanded food safety and infectious and emerging disease research programs (including agroterrorist agent surveillance), and vaccine development research that require BSL2 containment for animals and BSL3 containment for vectors. (www.globalhealth.wsu.edu). The facility will support the activities of the Animal Health Research Center, Safe Food Initiative, and the USDA-ARS Animal Disease Research Unit as well as the School for Global Animal Health.

In response to growing public awareness and concern, in the last decade the College has greatly expanded its research programs related to safety of food derived from animals, the link between

animal health and economic stability and the role of animals as reservoirs for emerging diseases that threaten human health. Expansion of these programs, and increased responsibilities to our agriculture stakeholders and the public have exceeded the scope and design of current limited facilities for housing agricultural animals for infectious disease research.

Increased stringency of Biosecurity and Biocontainment standards for working on infectious agents have made current facilities, while limited to begin with, nearly obsolete. There is extremely limited availability

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(WSU College of Veterinary Medicine)

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of agricultural animal infectious disease research housing on the Washington State University Pullman campus. There is NO housing at the BSL3 level available, and currently no insectary or tick rearing facility on campus. **The proposed new facility addresses CVM strategic priorities and multiple state priorities of government relating to “health, security, economic vitality, safety, and natural resources” (OFM Priorities of Government), and is strongly supported by stakeholders in the state and region.**

The School for Global Animal Health is unique among North American institutions of higher education. Partnerships have been developed with the University of Washington, Fred Hutchison Cancer Research Center, Seattle Biomedical Research Institute, Infectious Disease Research institute, PATH, and PNNL in the Global Health Alliance and Washington Vaccine Alliance. As an example of the work to be done in the School, the lead project for a Life Science Discovery Fund proposal of the Washington Vaccine Alliance is the School’s component to develop a vaccine against *E. coli* O157 in animals. Recognition of this project came from Governor Gregoire at the recent Pacific Health Summit where she announced an agreement between the State of Queensland and Washington State University to collaborate on achieving this goal. Availability of the Agricultural Animal Research Building is integral to this work.