

WASHINGTON STATE UNIVERSITY Veterinary Medical Research Building

2009 – 11 Request:	\$7,400,000	Project Type:	Program (Research)
Institution Priority:	#2	Project Phase:	Design
		Gross Square Ft:	128,281

\$7.4 million in design funding is requested in the 2009-2011 capital construction budget to prepare for construction in 2011-2013 of this critical neuroscience, cardiac muscle, and bioengineering research and education building at WSU.

It is the number one capital priority for WSU's Pullman campus (#2 overall) because the university has identified it as crucial to the success of these innovative biomedical research and high-demand undergraduate, graduate, and professional education programs of the College of Veterinary Medicine and of related programs and collaborators in bioengineering and animal science.

The 35-40 faculty biomedical researchers to be moved to this building, along with the approximately 200 research personnel (graduate students, post-docs, and technicians) who support them and the approximately 100 undergraduate students per year whose education is enriched by conducting research in these labs, are among the most successful and productive scientists at WSU. Because the focus of their research is on the innovative biomedical science that underpins improvements in human health and well-being, as well as animal health and well-being, these researchers receive most of their grant funds from the National Institutes of Health.

Funding also comes from other federal sources and from non-federal voluntary health organizations like the American Heart Association, the Juvenile Diabetes Research Foundation, and the National Alliance for Research on Schizophrenia and Depression. These annual research expenditures have doubled since FY2000, from about \$3.4 million to well over \$6 million.

This funding has direct and indirect economic benefits – such as continued commercialization via startup companies and licensing agreements. Provided with suitable facilities, these scientists are likely to at minimum sustain this rate of growth. This growth is jeopardized by the status quo, however. For example, expenditures would be nearly \$2.1 million per year higher (supporting about 29 technician and graduate student salaries) had the amount and quality of space not been a significant factor in the choice by key faculty to come to, or leave, WSU.



The Veterinary Medical Research Building is critical in advancing key WSU research and education programs that will impact the economy of Washington. These multi-disciplinary research thrusts will improve human and animal health by acquiring fundamental knowledge that advances our fight against neurological and behavioral diseases, diabetes and obesity, substance abuse, sleep disorders, and by enhancing reproductive and cardiovascular health.

These programs are at the core of WSU's research pre-eminence in one of six targeted areas, *Brain, Behavior and Performance*, and contribute to another, *Chromosome Biology and the Science of Reproduction*. These Pullman-based programs will spur collaborative interactions and growth in comprehensive health sciences academic and research programs at WSU-Spokane.

The magnitude of research problems in the 21st century demand interdisciplinary and integrated approaches, i.e. "big science". Currently, the tremendous growth potential of these innovative,

world-class research and education programs is stunted because these scientists struggle to operate in insufficient, outdated, 55-year-old space that is poorly suited to the safe and efficient conduct of modern biomedical research. Our best research faculty are working in outdated facilities and are scattered across multiple buildings, thus hampering the interactions and the synergies that lead to greater advances and larger program grants.

This Pullman facility will remove these serious barriers by providing state-of-the-art space to enhance critical interdisciplinary research and education programs, fostering growth in research and education to advance livestock, companion animal and human health and well-being and the economic benefits that will ensue.

Washington will benefit both from enhanced life science education at the undergraduate and graduate levels and from increased discovery of fundamental biomedical knowledge that will lead to improved human and animal health and drive the economy through commercialization of those discoveries.