Capital Project for the Virginia Bioinformatics Institute Data Center Expansion

**JOINT BUILDINGS AND GROUNDS COMMITTEE
AND FINANCE AND AUDIT COMMITTEE**

July 17, 2015

The Virginia Bioinformatics Institute (VBI) was established in 2000 with the mission to lead the Commonwealth's and the university's efforts to become a national and international leader in the field of bioinformatics and to enhance the state's overall efforts in the life sciences. Since opening in 2000, VBI has grown from a staff of five in a small temporary leased space in the Corporate Research Center (CRC) to a major research engine with over 250 employees and about 130,000 gross square feet of on-campus laboratory space.

The Institute is a critical research engine for the university with over 83 research projects, a total current research portfolio of $102 million, and a three-year average of $17 million of annual research expenditures. The university's vision to expand research under the Institute is a key strategic initiative for the future. The primary growth areas for VBI require high performance computing capabilities to operate web-based tools with real-time computing capabilities to support interactive applications backed by advanced computing models.

The Institute has two existing data centers that are operating at full capacity and cannot support additional computing requirements. Thus, more high performance computing capability is required to support a significant further expansion of the Institute's sponsored research activity. The proposed solution is to convert approximately 2,700 square feet of underutilized laboratory space on the first floor to a high performance data center. The renovation to support the new data center will require upgrades to the building's power supply (additional two megawatts), cooling service, cooling racks, and computing equipment.

VBI has secured a grant from the Defense Threat Reduction Agency (DTRA) that would pay for additional sponsored research and the computing equipment needed to outfit a high performance computing data center. The Federal funds associated with this grant for equipment will be available in October, 2015 and must be expensed by August 2016. The research grant will not cover the necessary building and infrastructure upgrades needed for the data center.

This request is for a $5.9 million renovation project to make the necessary building and infrastructure upgrades to establish a new high performance data center within the Institute. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of the overall project. The university has worked conjointly with the Institute on a funding plan that calls for internal financing that will be repaid over time by overhead revenues generated from the Institute's grants and contracts.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, debt issuances, and overall funding of nongeneral fund capital outlay projects. This request is for a $5.9 million project authorization for the Virginia Bioinformatics Institute Data Center renovation project.

**RESOLUTION ON CAPITAL PROJECT FOR
VIRGINIA BIOINFORMATICS INSTITUTE DATA CENTER EXPANSION**

WHEREAS, the university's vision to expand research under the Virginia Bioinformatics Institute (VBI) is a key strategic initiative for the future of the institution; and,

WHEREAS, VBI requires additional high performance computing capabilities to grow research activity; and,

WHEREAS, the Institute has secured a grant from the Defense Threat Reduction Agency (DTRA) that would pay for additional sponsored research and the specialized equipment needed for a high performance computing data center; and,

WHEREAS, the Federal funds associated with this grant would be available in October, 2015 and the research grant will not cover the necessary building and infrastructure upgrades needed to support a high performance computing data center; and,

WHEREAS, the proposed project is a renovation to the existing building that would upgrade the services for electrical and cooling infrastructure and renovate approximately 2,700 gross square feet of space on the ground level necessary to support a new data center; and,

WHEREAS, the cost of the project is $5.9 million and the university has developed a 100 percent nongeneral fund resource plan to support the costs; and,

WHEREAS, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has authority to approve the budget, size, scope, debt issuances, and overall funding of nongeneral funded capital outlay projects;

NOW, THEREFORE, BE IT RESOLVED, that the university be authorized to move forward with the planning and construction of the Virginia Bioinformatics Institute Data Center Expansion project at a total project cost not to exceed $5.9 million.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to complete the Virginia Bioinformatics Institute Data Center Expansion be approved.

August 31, 2015