

COMMISSION FOR HIGHER EDUCATION

Friday, October 8, 2010

DECISION ITEM B-6: Neurosciences Research Building at the Indiana University – Purdue University Indianapolis Campus

Staff Recommendation

That the Commission for Higher Education recommend approval to the State Budget Agency and the State Budget Committee of the project *Neurosciences Research Building at the Indiana University – Purdue University Indianapolis Campus*, as described in the project description and staff analysis October 8, 2010.

Background

By statute, the Commission for Higher Education must review all projects to construct buildings or facilities costing more than \$500,000, regardless of the source of funding. Each repair and rehabilitation project must be reviewed by the Commission for Higher Education and approved by the Governor, on recommendation of the Budget Agency, if the cost of the project exceeds seven hundred fifty thousand dollars (\$750,000) and if any part of the cost of the project is paid by state appropriated funds or by mandatory student fees assessed all students. Such review is required if no part of the project is paid by state appropriated funds or by mandatory student fees and the project cost exceeds one million dollars (\$1,000,000). A project that has been approved or authorized by the General Assembly is not subject to review by the Commission for Higher Education. However, the Commission for Higher Education shall review a project approved or authorized by the General Assembly if the review is requested by the Budget Agency or the Budget Committee. This project was not authorized by the General Assembly.

The Trustees of Indiana University request authorization to proceed with the construction of the School of Medicine’s Neurosciences Research Building located on the IUPUI campus. This project is estimated to cost \$53,000,000 of which \$43,000,000 will be funded through academic facilities/student fee bonds. The Indiana General Assembly granted the bond issuance of \$20,000,000 in 2007 and \$23,000,000 in 2009. In addition, the university will contribute \$5,000,000 from School of Medicine Gifts and \$5,000,000 from Auxiliary Reserves to this critical project.

Supporting Document

Neurosciences Research Building at the Indiana University – Purdue University Indianapolis Campus, October 8, 2010.

NEUROSCIENCES RESEARCH BUILDING AT THE INDIANA UNIVERSITY – PURDUE UNIVERSITY INDIANAPOLIS CAMPUS

Project Description and Staff Analysis

SUMMARY

This project constructs the Indiana University School of Medicine's Neurosciences Research Building located in the area of 16th street and Senate Avenue near the Methodist Hospital campus in Indianapolis, Indiana. The Neurosciences Research Building, formerly named Research Institute IV, is a continuation of the School of Medicine and Indiana University's focus on expanding and strengthening the biomedical and life sciences research capability of the university. This building provides laboratory-research space for new scientists and expansion space for existing psychiatric and neuroscience research at Indiana University (IU) to create a unique national model for collaborative, transdisciplinary patient care, research, and education for neuropsychiatric and neurological disorders is reflected in two proposed buildings fostering the critical links between superb clinical services and advanced research on disorders of the nervous system. The IU School of Medicine Neuroscience Research Building will bring together current research faculty, newly recruited investigators, and practicing clinicians in a novel organizational structure to achieve both excellence and efficiency in transdisciplinary and translational (bench to bedside and back) research. The location of the new Neurosciences Research Building near the Methodist Hospital campus will capitalize on synergies that are developing in that location. This will be the first building on the site to be jointly developed by IU and Clarian. Development of the research building will be adjacent to the proposed Clarian Neuroscience Center of Excellence Building which will house the offices and outpatient care and research activities of clinical faculty in the psychiatry, neurology, and neurosurgery departments at the IU School of Medicine. This synergy will insure that opportunities for translation of research discoveries to patient care will be both identified and fostered. The northern terminus of the Clarian People Mover connecting Methodist Hospital with the IUPUI campus is located adjacent to this site for easy access to the medical school campus and hospitals. The synergies created by this confluence of laboratory, hospital, and medical staff buildings make this an ideal location for the IU School of Medicine's Neurosciences Research Building.

DESCRIPTION OF THE PROJECT

The Neurosciences Research Building contains approximately 74,000 assignable square feet (ASF) and provides basic research space for psychiatry, neurology, neurosurgery, and basic neuroscience research at Indiana University to create a unique national model for collaborative, transdisciplinary patient care, research, and education for neuropsychiatric and neurological disorders. The two proposed buildings will foster critical links between superb clinical services and advanced research on disorders of the nervous system.

The Institute of Psychiatric Research will be a primary occupant of the building. A portion of the Stark Neuroscience Research Institute will relocate to the new building.

The interior design of the facility is intended to foster collaborative research through shared technical support and centralized analytical facilities. The building features a modular floor plan to provide flexibility in adapting to changes in programs and funding, and to maximize the performance of scientific instruments. The dedicated vivarium will serve the basic research conducted in this building.

Design flexibility is the hallmark of any new laboratory-research building. This creates the ability to adapt to changes in technology and programs, so research is not limited by the building in which it is located. This "generic" space in this facility will not be highly customized; instead, it will meet a basic set of design criteria for ventilation, power, illumination, telecommunications, distributed utilities, and architectural finishes. A modular approach, generic in layout and equipment with specialized and unique equipment located in shared-equipment areas, meets this goal of flexibility and adaptability.

Rather than assignment of research space to traditional departmental units, the school has formed interdisciplinary teams of researchers with broad expertise and a disease oriented focus. The thematic teams include investigators in addictive disorders, neurotrauma, epilepsy, neurodevelopmental disorders such as autism, Alzheimer's and other dementias, anxiety and mood disorders, and pain. Research space design will incorporate access to shared state-of-the-art facilities for biochemical to behavioral approaches optimized to provide cross-fertilization of discoveries within and between the research themes.

Each laboratory group has access to common or shared-use facilities. Facilities that are not specialized, such as equipment and environmental rooms along with gas cylinder storage areas will be distributed throughout laboratory areas. Common support spaces for expensive instrumentation are key features of the newer multidisciplinary research laboratories; thus, spreading the cost of equipment over more users. Facilities housing highly specialized equipment will be located near laboratory groups using that equipment and taking into account considerations of security, safety, equipment requirements, and research sensitivity.

Research space is planned for aiding the transition of discoveries by our researchers into licensable intellectual property for new therapies and devices for patients with severe neurological disorders. Interaction areas with marker boards and comfortable furnishings would be placed in areas where people congregate. Principal investigator and staff-office locations would provide adjacencies fostering interaction and collaboration, yet allowing good laboratory supervision and oversight. Meeting facilities for informal and regularly scheduled meetings would be equipped with network capability for the use of digital presentation technologies.

RELATIONSHIP TO MISSION AND LONG-RANGE PLANNING

The Neurosciences Research Building, along with Research Institute, Phases I, II, and III, directly support the university and campus emphasis on research and the Life Science Initiative. Also, it supports other outside entities in research and their funding contributions to the university. The project is part of Indiana University's long-range plan to provide critically needed world-class research space at IUPUI.

NEED AND EXPECTED CONTRIBUTION TO EDUCATIONAL SERVICES

In 2003-2004, a detailed survey of Indiana University's research space was conducted by the university. The survey found an immediate need for nearly 700,000 ASF of new research space on the IUPUI campus. The long-term (ten years +) need for research space on the IUPUI campus exceeds one-million square feet. The survey established that the key-limiting factor to the development of Indiana University's research capabilities is the lack of research space; thus, creating a serious impediment to the university in recruiting research faculty, acquiring external grants, expanding successful research programs already on campus, and pursuing new collaborations and fields of research. The goal of the university is to create the needed research facilities within the next ten years to maintain its position as one of the premier research universities in the nation. It is with this critical need for research space in mind that the Neurosciences Research Building is submitted.

The Neurosciences Research Building will allow Indiana University to continue enhancing its standing as a top-tier research university by providing modern research space that would assist in attracting new world-class scientists who could obtain grants and conduct groundbreaking research. The addition of this building to the IUPUI-research community would provide critical laboratory research space for new scientists and expansion space for existing research on campus. This new facility and others like it would help the university recruit and retain more of these world-class scientists.

This new facility would provide modern and critical laboratory and research space for several key departments such as the Institute of Psychiatric Research (IPR) and the Stark Neurosciences Research Institute (SNRI). The IPR is an important part of the Indiana University School of Medicine's Department of Psychiatry. Now in its fiftieth year, the mission of the IPR is "to understand the neurobiological origins of and develop treatment for psychiatric disorders such as addictions, schizophrenia, anxiety, mood disorders, autism, Alzheimer's disease, and sleep disturbances resulting from these disorders." In addition, IPR faculty serves as mentors to PhD and MD/PhD students in the graduate program in medical neurobiology.

Neuroscience research has a long history of excellence at the Indiana University School of Medicine. With researchers from various disciplines, the SNRI focuses on applying advances in molecular, genetic, and imaging technologies to fundamental questions about brain function, dysfunction, and development.

The SNRI is home to several highly productive neuroscience-research groups including two internationally recognized research centers funded by the National Institutes of Health: (1) Alzheimer's disease and (2) alcoholism. Along with these efforts, there has been a local corporate focus on the development of drugs for neurological disorders at Eli Lilly Corporation, whose headquarters are located in Indianapolis, Indiana.

The Department of Neurology's Biomedical Research focuses on Alzheimer's disease, Jakob-Creutzfeldt disease, Pick's disease, progressive supranuclear palsy, and other neurodegenerative disorders. The Department of Neurosurgery's faculty collaborates with SNRI and conducts research associated with spinal disorders and brain and pituitary tumors. The location for the new Neurosciences Research Building near the Methodist Hospital campus will capitalize on synergies that are developing in that location. This building will be the first building planned in that area; the other will be a new Clarian-owned Medical Office Building containing offices, clinics, and programs directly associated with psychiatric patient care, research, and services. The northern terminus of the Clarian People Mover connecting Methodist Hospital with the IUPUI campus is located adjacent to this site for easy access to the medical school campus. The synergies created by this confluence of laboratory, hospital, and medical staff buildings make this a premium location for the IU School of Medicine's Neurosciences Research Building. A new parking garage is also planned as part of the complex of which approximately 300 spaces are included in this project.

ALTERNATIVES CONSIDERED

Due to space limitations and the critical need for more research space of this type on the IUPUI campus, it was determined in the early stages of this program that new construction in phases was the only option available.

RELATIONSHIP TO LONG-RANGE FACILITY PLANS

This project (formerly titled Research Institute IV) has been on the university's ten-year plan since 2002.

HISTORICAL SIGNIFICANCE

Indiana University does not consider any of the buildings or structures affected by this project to be significant.

STAFF ANALYSIS

Indiana University is requesting approval from the Commission to move forward with the Neurosciences Research Building for the IUPUI campus, to be located next to Methodist Hospital along 16th Street in Indianapolis. The estimated cost of the project is \$53 million, with \$43 million from state funding authorized by the 2007 and 2009 General Assembly, \$5 million from the IU School of Medicine gifts and \$5 million from Auxiliary Reserves. The estimated fee replacement associated with the \$43 million is \$3.7 million annually. For 2011, IU's estimated debt ratio is 13.3% and is projected to be 12% in 2013 based on Commission calculations.

The project has two major components, the requested Neuroscience Research Building by IU and the Clarian Neuroscience Center of Excellence building. The Neuroscience Research Building will house the Institute of Psychiatric Research that is currently housed on the Wishard site, along with various research faculty and staff located throughout IUPUI focusing on neurosciences. The IUPUI building will provide space for research faculty, students with the IU School of Medicine and staff who are working on neuroscience research. The Clarian Neuroscience Center for Excellence facility will house mostly outpatient care and research activities of clinical faculty, creating two facilities that will work together to research, study and possibly treat neurological issues.

Clarian will provide approximately \$100 million to fund their portion of this project which will include the Center for Excellence Building, Clarian's portion of the parking garage and various infrastructure improvements in the area being constructed. IU's cost of \$53 million will cover the research building, IU's portion of the parking garage and various infrastructure improvements in the construction area. Both buildings are tied together and create an investment of over \$150 million in the area of neuroscience research.

The operational cost of the new facility will be covered by vacating the current Psych Sciences Center, which will be demolished by Wishard as part of the New Wishard project. Researchers in that facility will move to the new Neurosciences Research Building and costs to operate will shift from the demolished building to the new facility, roughly \$1.3 million annually. Failure to construct a new neuroscience facility by the time demolition occurs could force researchers to look elsewhere for space or potentially move away from IU. In addition, since both projects are closely tied together in relation to research and clinical work, failure to act on this capital project could put into question Clarian's proposal to construct a neurosciences facility.