

Contact: Andrea Anania

UNIVERSITY OF IOWA EQUIPMENT PURCHASE

Action Requested: Consider approval for the University of Iowa to purchase a General Electric PETrace 880 Cyclotron system for a total cost of \$2,336,720.

Executive Summary: Equipment purchases at the Regent institutions costing more than \$1 million are required by Board policy to be approved by the Board of Regents.

Description of the Equipment

The General Electric PETrace 880 Cyclotron system:

- ◆ Is necessary to make radionuclides and radiopharmaceuticals for the four Positron Emission Tomography (PET) scanners that are in operation in the Departments of Radiology and Radiation Oncology at the University of Iowa Hospitals and Clinics (UIHC). The scanners are used clinically for the diagnosis of cancer, heart disease, and neurologic disorders and also for research in these and other areas;
- ◆ Is configured to produce: (1) standard radionuclides for the near future; and (2) research radionuclides that are slated to be the “next generation” clinical agents in the next 5-10 years. This built-in capability will allow the University to make these new clinical agents without additional capital expense. The new system will position the University to continue to grow its role in clinical trial participation, which will enhance the University’s reputation and grow diversified clinical diagnostic options; and
- ◆ Will be installed in the existing cyclotron vault in the John Pappajohn Pavilion at UIHC and include additional radiation shielding to assure safe operation in accordance with both state and federal regulations.

Justification of the Need for the Equipment

The University reports that:

- ◆ The purchase of a General Electric PETtrace 880 Cyclotron system will replace the existing Scanditronix (original manufacturer) MC-17 Cyclotron that has been in use for over 20 years. Typically cyclotrons operate for between 10 and 20 years before replacement is required. The existing Cyclotron is at the very tail end of its useful life;
- ◆ Scanditronix no longer makes cyclotrons, and spare parts are only available from the shrinking number of decommissioned cyclotrons; only three left in the world and no upgrade path is available;
- ◆ A catastrophic parts failure with no available replacement part would conservatively result in an additional \$400,000 during the six months time it would take to perform an “emergency” replacement of the Cyclotron; and
- ◆ Installation of a new, state-of-the-art Cyclotron will position the University to meet the continuing growth for clinical PET imaging studies for the next two decades with minimal additional operational expenses.

Any Known Alternatives to the Equipment Proposed

A Request for Proposal (RFP) was issued and two vendors responded. Each vendor provided two reference sites and the sites were contacted to assess satisfaction:

- ◆ A site visit was made to Massachusetts General Hospital to view a recently installed General Electric PETtrace 880 Cyclotron.
- ◆ The second vendor, IBA Group, did not have a current operational system available for a site visit within the United States. Instead, IBA Group visited the University and ran an on-line simulated Cyclotron operation demonstration.

After follow-up questions, a preferred vendor was identified by the evaluation committee. The preferred vendor, General Electric Company Medical Systems, offered the highest level of functionality and service more than \$200,000 less than the competing bid. An additional \$100,000 in value-added discounts was negotiated from the original RFP price in the form of an extended warranty.

Estimated Cost and Source of Funding

The cost of the General Electric PETTrace 880 Cyclotron system is \$2,336,720. The source of funding is UIHC capital equipment funds.

Board Policy: Chapter 7.06B(12) of the Regents Policy Manual requires that:

- ◆ Equipment costing more than \$1,000,000 must be submitted to the Board for approval; and
- ◆ Requests submitted to the Board Office for approval must include the following information:
 - ◆ Description of the equipment;
 - ◆ Justification of the need for the equipment;
 - ◆ Any known alternatives to the equipment proposed; and
 - ◆ Estimated cost and source of funding.