

Contact: Andrea Anania

UNIVERSITY OF IOWA EQUIPMENT PURCHASES

Action Requested: Consider approval for the University of Iowa to purchase a:

- ▶ Siemens Artis Zee Biplane Fluoroscopic Imaging System for \$1,442,617; and
- ▶ Siemens 1.5 Tesla Magnetom Aera Magnetic Resonance Imaging System for \$1,952,046.

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.

SIEMENS ARTIS ZEE BIPLANE FLUOROSCOPIC IMAGING SYSTEM (AZBFIS)

Description of the Equipment

The Siemens AZBFIS will enable interventional cardiologists to perform cardiac imaging and, due to its added digital subtraction capabilities, enable vascular surgeons to use it in peripheral vascular cases. AZBFIS is the latest version of cardiac imaging equipment from Siemens.

Justification of the Need for the Equipment

The University reports that:

- ▶ The purchase of a Siemens AZBFIS for UIHC's Heart and Vascular Center's Cardiac Catheterization Laboratory 2 will replace the current Siemens single plane fluoroscopic imaging system that was installed in October 2003 and is near the end of its useful life;
- ▶ The current single plane fluoroscopic imaging system is a heavy maintenance burden and requires continuous repair to remain operational;
- ▶ The Cardiac Catheterization Laboratory currently has only one biplane system and it lacks digital subtraction capability. This system is predominately used by electrophysiologists. If cardiologists need to have biplane capabilities, scheduling issues and procedure delays may occur;
- ▶ Biplane capability is needed for many purposes. For example, a biplane imaging system is essential for patients with renal failure. A biplane system enables physicians to acquire two different images with one injection of x-ray dye; limiting x-ray dye can decrease risk to the patient's kidneys;
- ▶ A Siemens AZBFIS would provide the latest in high quality images with a component called Dyna Computed Tomography. This component offers excellent soft tissue image quality through rotational angiography which can be reconstructed into 3D images. This technology can establish optimal imaging angles for deploying the valve for patients who undergo transcatheter aortic valve replacement surgery;
- ▶ The AZBFIS also has a feature called the CARE package. This reduces the patient's and operator's exposure to radiation, provides dose monitoring during the procedure, and makes dose reporting easy and structured; and
- ▶ AZBFIS will improve imaging quality, provide capabilities for performing a broader spectrum of exams, and increase patient safety by reducing radiation exposure and limiting contrast dye usage.

Any Known Alternatives to the Equipment Proposed

The University reports that the AZBFIS will be purchased from Siemens Medical Solutions through the UIHC/Siemens Strategic Alliance Purchasing Agreement.

Estimated Cost and Source of Funding

The cost of the Siemens AZBFIS is \$1,442,617; the cost reflects a savings of approximately 37% off list price as a result of the purchasing agreement. The source of funding is UIHC capital equipment acquisition funds.

SIEMENS 1.5 TESLA MAGNETOM AERA MAGNETIC RESONANCE IMAGING SYSTEM (TMAMRIS)

Description of the Equipment

The University reports that the Siemens TMAMRIS scanner:

- ◆ Is the latest generation scanner and includes more advanced motion correction sequences, which improves image quality while allowing less use of sedation. This in turn decreases patient prep time, improves patient safety, and reduces cost by minimizing the need for repeat exams;
- ◆ Has increased receiver channels which will make it possible to cover more body area at the same time and thus reduce exam times, as well as improve both patient comfort and throughput; and
- ◆ Has a larger bore size within the gantry, which will increase patient comfort, reduce claustrophobic feelings, and minimize the number of patients that have to be turned away because of size and weight limitations of current scanners.

Justification of the Need for the Equipment

The purchase of a Siemens TMAMRIS will replace an existing Magnetom Avanto MRI scanner which was installed at UIHC's Radiology department in May 2004. The current system is fully depreciated and is approaching the end of its useful life from a technological standpoint.

Any Known Alternatives to the Equipment Proposed

The University reports that the TMAMRIS will be purchased from Siemens Medical Solutions through the UIHC/Siemens Strategic Alliance Purchasing Agreement.

Estimated Cost and Source of Funding

The cost of the Siemens TMAMRIS is \$1,952,046; the cost reflects a savings of approximately 35% off list price as a result of the purchasing agreement. The source of funding is UIHC capital equipment acquisition 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.