

Contact: Andrea Anania

EQUIPMENT PURCHASE – UNIVERSITY OF IOWA

Action Requested: Approve the University of Iowa's request to purchase a GE Discovery MR750W 3.0 Tesla Whole Body Magnetic Resonance Imaging Scanner (GE Tesla Whole Body MRI Scanner) for \$1,350,000.

Executive Summary: The Board is asked to approve an equipment purchase for the University of Iowa costing more than \$1,000,000.

Background: 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 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.
-

Analysis:

Description of the Equipment

The GE Tesla Whole Body MRI Scanner makes use of the property of nuclear magnetic resonance (NMR) to image nuclei of atoms inside the body allowing for more detailed, higher resolution images of the human body than are possible with x-rays.

Justification of the Need for the Equipment

The University reports that:

- ▶ The GE Tesla Whole Body MRI Scanner is requested by SUI's Department of Radiology for use in the Magnetic Resonance Research Facility (MRRF).
- ▶ The MRI scanner will expand the number of radio frequency (RF) channels available and provide new high-density RF coils resulting in additional imaging techniques as well as a more open design for participant comfort. These features enable higher resolution, which will provide improved imaging in young children and shorter scan times. In addition, this equipment will integrate with the existing GE 7 Tesla scanner to provide a single, unified software platform for the translation of image findings between the two GE MRI Scanners.
- ▶ The requested unit will replace an existing Siemens Trio 3 Tesla MRI scanner that has been in use for seven years, is near the end of its technological useful life, and is no longer capable of performing the desired applications.
- ▶ Supporting research efforts across the University, the scanner equipment will be utilized by departments within the Carver College of Medicine, College of Engineering, Tippie College of Business, College of Nursing, and College of Liberal Arts & Sciences. In addition, central instrumentation research facilities like the Positron Emission Tomography Imaging Facility and the MRRF also will use this equipment.

Any Known Alternatives to the Equipment Proposed

SUI issued a Request for Proposal (RFP) for a 3.0 Tesla Scanner. Responses were submitted by three vendors (GE Healthcare, Siemens Medical Solutions, and Philips Healthcare.)

The evaluation committee determined the GE Healthcare proposal was responsive and the value provided was in the best interest of the University. Purchase of the GE Tesla Whole Body MRI Scanner will allow SUI to remain competitive for future grant applications and enhance ongoing research projects currently underway.

Estimated Cost and Source of Funding

The cost for the GE Tesla Whole Body MRI Scanner is \$1,350,000. The source of funding is College of Medicine gifts and earnings.