

Contact: Patrice Sayre

**UNIVERSITY OF IOWA
EQUIPMENT PURCHASE**

Action Requested: Consider approval for the purchase of Siemens Single and Bi-Plane Angiography X-Ray Systems – total \$3,804,307.

Executive Summary: The University of Iowa requests approval to proceed with the purchase of Siemens Single and Bi-Plane Angiography X-Ray Systems for the University of Iowa Hospitals and Clinics (UIHC).

Description of Equipment

The single and bi-plane angiography systems will be installed in specially-designed operating rooms in UIHC's Main Operating Room Suite on the fifth floor of John Colloton Pavilion.

This equipment will provide interventional neuroradiology procedures for neurosurgical patients with cerebrovascular disease and treat patients in several other services including General and Trauma Surgery, Cardiothoracic Surgery, Trauma Surgery, Orthopaedic Surgery, and Urology.

The systems will also be used by Interventional Radiologists and Cardiologists. Procedures to repair conditions such as vascular trauma, thoracic aneurysm, thoracic dissection, and inserting carotid stents will be completed in these rooms. The new systems will also provide UIHC the expanded capacity needed to accept more referrals for interventional and surgical revascularization procedures.

Justification of Need for Equipment

UIHC currently uses portable c-arm fluoroscopy units to perform intra-operative angiograms and endovascular procedures. The images obtained from these units are of a lower resolution than those provided by fixed units, are subject to motion irregularities, and do not always meet patient needs (e.g. obese patients need a higher power system to obtain the appropriate scan.) Additionally, (1) portable systems may become overheated during a procedure and shut down, which delays the procedure and negatively impacts patient care; and (2) radiation exposure with the current portable system is excessive as compared to fixed systems.

The new systems will overcome these problems. They provide high resolution imaging; these images will be stable across the full range of vascular and neuro-interventional applications. They can precisely be aligned with the table/patient and use a large digital detector which, through an ample field of view, enables a surgeon to easily see their way through angiography or neuro-interventional imaging procedures.

Similar installations of angiographic equipment in operating rooms are now occurring in a number of teaching and leading community hospitals to provide the capability for performing contemporary and evolving operative procedures that require interventional radiologic imaging capabilities.

Any Known Alternatives to the Equipment Proposed

The equipment pricing is based on the Strategic Alliance Purchasing Agreement between Siemens Medical Solutions USA, Inc. and The University of Iowa. UIHC has standardized on Siemens equipment due to the advantages gained in equipment pricing, maintenance, and training.

Estimated Cost and Source of Funding

The cost for the Siemens single plane system is \$1,447,899; the cost of the Siemens bi-plane system is \$2,356,408; and the source of funding is UIHC capital equipment funds.

Board Policy:

Chapter 7.05B(12) of the Regent 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.