

Contact: Andrea Anania

**EQUIPMENT PURCHASES – UNIVERSITY OF IOWA**

**Action Requested:**

- ▶ Approve the University of Iowa's request to purchase:
    - ◆ A Siemens Medical Solutions USA Incorporated MIYABI Angiographic and Computed Tomography (CT) Medical Imaging System at a cost of \$2,472,806; and
    - ◆ A Roche Diagnostics Corporation Cobas 8100 System at a cost of \$1,957,029.
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**Executive Summary:** The Board is asked to approve two equipment purchases for the University of Iowa each costing more than \$1,000,000.

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**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;
- ▶ The Executive Director may approve emergency purchases which exceed \$1,000,000 to be followed by Board ratification. Emergency purchases are defined as purchases that are critical to sustaining patient care or human life, maintaining critical research equipment, or similar instances. Emergency purchases may also be defined as those purchases that are time sensitive;

Before submission to the Executive Director for approval, emergency purchase requests must be approved by the vice president for business and finance, superintendent, or equivalent title, or their designees, with subsequent ratification by the Board of Regents at the next scheduled meeting; 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.
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**Analysis:**

**UNIVERSITY OF IOWA**

**SIEMENS MEDICAL SOLUTIONS USA INCORPORATED MIYABI ANGIOGRAPHIC AND COMPUTED TOMOGRAPHY (CT) MEDICAL IMAGING SYSTEM (MIS)**

**Description of the Equipment**

MIYABI Angiographic and CT MIS is a customized solution combining a conventional single plane interventional x-ray system with a 64-slice CT system for critically ill patients that require both conventional interventional and CT procedures. This combined modality approach provides intra-procedural high-end cross sectional imaging of scanned body parts in addition to conventional interventional fluoroscopy and x-rays for vascular imaging.

**Justification of the Need for the Equipment**

The University reports that:

- ▶ This equipment is requested by the University of Iowa Hospitals and Clinics (UIHC) Department of Radiology to replace a Siemens ARTIS bi-plane angio system that has been in use for 12 years and has reached the end of its useful life, normally 7-8 years. The current system has poor image quality, limiting the types of procedures performed;
- ▶ The MIYABI Angiographic and CT MIS will be utilized to perform advanced state-of-the-art interventional imaging exams that far exceed those capabilities available on the system being replaced. This will allow completion of patient interventional procedures using the MIYABI Angiographic and CT MIS verses moving the patient from the interventional x-ray unit suite to a different location to perform the CT scan;
- ▶ This new technology will provide a substantial reduction in radiation doses to patients and related staff who perform the procedure, including physicians, technologists, and nurses;
- ▶ The installation of a new state-of-the-art MIYABI Angiographic and CT MIS will position UIHC to meet the continuing growth in requests for complex interventional imaging studies thus enhancing UIHC's ability to serve patients within Iowa and across the region; and
- ▶ If the equipment is not replaced, physicians and patients will not receive the benefits available through technical and clinical diagnostic improvements and continuing to use the existing equipment will result in increased repair costs.

**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. This agreement was executed after a competitive bidding process involving eight vendors. When the initial strategic alliance agreement reached the end of its term, it was extended to 2018.

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 MIYABI Angiographic and CT MIS is \$2,472,806. The price represents an approximate 43% savings off list prices. UIHC earnings reserved for capital equipment acquisitions is the source of funding.

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## **ROCHE DIAGNOSTICS CORPORATION COBAS 8100 SYSTEM**

### Description of the Equipment

The Roche Diagnostics Corporation Cobas (RDCC) 8100 System is a pre-analytic processor and automated specimen transport system that performs an extensive inspection of samples for maximum workflow efficiency. A high resolution optical camera is used to photograph patient specimen tubes, match the ordered test with the color of the cap, and remove any errant specimens from processing.

### Justification of the Need for the Equipment

The University reports that:

- ▶ This equipment is requested by the University of Iowa Hospitals and Clinics (UIHC), Department of Pathology, Chemistry and Hematology Laboratories, to replace the current, 9 year-old Modular Pre Analytics (MPA7), containing centrifuges, decapping, and aliquoting devices, as well as specimen transport track;
- ▶ The current equipment was not designed for the volumes that the core clinical laboratory is experiencing today;
- ▶ The future goal of including Hematology and Coagulation testing in the automated system would not be possible using the current equipment due to both volume and analytical speed;
- ▶ The RDCC 8100 System will connect and interface with Chemistry and Hematology analyzers currently used in the Pathology Core Clinical laboratory. The high resolution optical camera will more accurately measure the color of plasma and report it as a hemolysis indicator;
- ▶ The RDCC 8100 System will be used for approximately 20,000 tests per day serving a majority of inpatients and outpatients to consolidate testing and require fewer blood samples from patients thus minimizing blood loss from phlebotomy; and
- ▶ The new process will support current UIHC initiatives, especially for pediatric and critically ill patients, to minimize iatrogenic anemia and the subsequent need for blood transfusions.

### Any Known Alternatives to the Equipment Proposed

A sole source purchase justification was received and approved by the Purchasing department. The RDCC 8100 System is the only system compatible with analyzers and transport system equipment from other manufacturers. Other vendors in the market do not have the same capability.

### Estimated Cost and Source of Funding

The cost for the RDCC 8100 System is \$1,957,029. UIHC revenues allocated for capital equipment acquisition is the source of funding.