

FY 2008 Technology Fee Proposal

Submitting Organization:

Major Unit: College of Health and Human Sciences

Department: Division of Respiratory Therapy

Contact Person: Robert Harwood/Anthony Roberts

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1. Project Short Title

Galileo Gold Mechanical Ventilator Simulator Computerized Upgrade

2. Total Requested

Fiscal Year 2008

\$ 9,000.00

3. Executive Summary

Project Description (three or four sentences)
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This upgrade package would provide respiratory therapy students with hands-on experience in the respiratory therapy teaching laboratory environment to train students to manage these complex pieces of equipment before a student's clinical rotation. A mechanical ventilator is a life-support system that is used in the neonatal, pediatric and adult intensive care units.
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4. Project Description

This proposal will upgrade the respiratory therapy laboratory mechanical ventilator for practical training and education for respiratory care students. The goal is to provide students with hands-on experience with similar equipment as seen in the neonatal, pediatric and adult intensive care units. This proposal includes purchase of a package that includes hardware and software upgrade so that students will simulate patient care and troubleshoot common patient situations that they will experience in the intensive care units during clinical rotations. This technology will be used in course assignments including adult, pediatric and neonatal acute care for both undergraduate and graduate students. Prior to attending their hospital rotation students must have knowledge of basic patient mechanical ventilator management and be familiar with the complex workings of a mechanical ventilator. This upgrade will provide the students with these skills.

5. Record the review numbers assigned by IS&T and Facilities. Their assessments must be included in Sections 16 and 17.

IS&T: 08-091

Facilities: 13879-07

6. Relevance to Regents Guidelines

- (1) Technology fee revenues should be used primarily for the direct benefit of students to assist them in meeting the educational objectives of their academic unit.
- (2) Tech fee revenues should be used for discipline specific software.
- (3) Technology fee revenues may be used for training of students and, to a lesser extent, staff and faculty.

7. Relevance to Strategic Plan(s)

The university's strategic plan states that part of its vision is to create a culture that provides a learning-centered academic environment with an emphasis on lifelong learning for students. The proposed project is closely aligned with the University's strategic plan because it addresses the need for students to develop clinical skills that are necessary for lifelong learning and provides easy access to clinical resources in a laboratory setting. It will create an opportunity for students to use technology resources to engage in problem-based learning, allow the students to critically think and improve the quality of their educational experiences.

8. Impact on Students Served

Forty-four students in the Division of Respiratory Therapy will be provided opportunities to work with this equipment in a laboratory environment as part of their educational requirement. Laboratory assignments will give the students hands-on experience prior to attending hospital rotations in the intensive care units. These assignments will use the equipment to simulate patient care situations that they will perform in the intensive care unit as they are treating patients. Since the mechanical ventilator is a self-contained unit that has all the software to complete these laboratory assignments, no other software or computer hardware or internet access is needed. In the laboratory the students will make adjustments, change functions of the ventilator and troubleshoot patient problems that will develop their skills to critically think in a real-life situation. The students will have access to the laboratory at assigned times as well as on an as needed basis by simply making an appointment with the lab instructor. This upgrade of this ventilator will provide these students equipment that is standard in hospitals in the Atlanta area and throughout the country.

9. Justification of Funding Requirements for Fiscal Year 2007

Provide a specific description of the funding requirements for FY 2007 in the Microsoft Excel spreadsheet below. You must use the same terminology as in the Project Description (page 2, #4) to allow each itemized line to be traced back to the items and functionality appearing in the Project Description. Failure to do so will negatively affect consideration of your proposal. Itemize and total the following categories of expense. If necessary, add lines to the table below corresponding to accounting objects of expense.

Please note that any equipment items less than \$4,999 should be categorized as "supplies."

Object of Expense	Itemized Descriptions	Quantity	Per unit price	Extended Total
Supplies (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4			
	Item 5			
	Item 6			
	Item 7			
Equipment	Galileo Gold Upgrade Package including warranty on installed parts at no cost.			\$9,000.00
	Item 2, etc			
Software (Note: Include Vendor and Product Name.)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
Maintenance or Contractual Services	Item 1			\$0.00
	Item 2, etc			
<i>Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)</i>				
Construction Services (Requires review of Planning & Facilities)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
Network Connections and Infrastructure Costs (Requires review of UCCS)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
Physical Security (Note: Costs normally should not exceed 2.5% of Total Requested.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
Other Expenses (explain)	Item 1			\$0.00
	Item 2, etc			
<i>Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)</i>				
Staff Salaries	Item 1			\$0.00
	Item 2, etc			
Fringe Benefits	Item 1			\$0.00
	Item 2, etc			
		Hours/wk	Hourly Rate	
Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
Graduate Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
TOTAL				\$9,000.00

10. Consequences of Partial Funding

At 75% funding, the project would remain viable but would eliminate the following additions to the hardware and software: Neonatal and pediatric capabilities, enhanced monitoring software and DuoPAP.

Object of Expense	Itemized Descriptions	Quantity	Per unit price	Extended Total
Supplies (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4			
	Item 5			
	Item 6			
	Item 7			
Equipment	Galileo Gold Upgrade Package with 6 month free warranty			\$5,063.06
	Item 2, etc			
Software (Note: Include Vendor and Product Name.)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
Maintenance or Contractual Services	Item 1			\$0.00
	Item 2, etc			
Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)				
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	Item 2, etc			
		Hours/wk	Hourly Rate	
Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
Graduate Student Assistant Salaries	Item 1			\$0.00
	Item 2, etc			
TOTAL				\$5,063.06

Partial Funding: Only 50% funded

At 50% funding, this project would not remain viable.

11. Standard Dollar Amounts

N/A

12. Standard Replacement Thresholds

N/A

13. Prerequisite, Non-Technology Fee Funding

N/A

14. Matching Funds

N/A

15. Staffing and Other Support Availability

N/A

16. Space Availability and Impact on Facilities

This project has no impact on facilities.

17. Impact on Computing/Networking/Information Security Infrastructure

IS&T Assessment of Network/Computing/Information Security Infrastructure:

<p><u>Information Security Review (Tammy Clark):</u> Impact: No Assessment:</p> <p><u>Wireless and Network Ports Review (Mark Roberson):</u> Impact: No Assessment:</p> <p><u>Server Connections (Charles Hollingsworth, Tammy Clark, Keith Campbell):</u> Impact: (No-CWH) Assessment:</p> <p><u>External Connections (Charles Hollingsworth):</u> Impact: (No-CWH) , No impact – KEC Assessment:</p> <p><u>DVR Installations (Mark Roberson, Tammy Clark, Charles Hollingsworth):</u> Impact: (No-CWH), (MR-No) Assessment:</p> <p><u>Lab and Classroom Configurations (Joe Amador):</u> Impact: Yes/No NO Assessment:</p>
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18. Physical Security Needs

N/A

19. Post-Project Assessment Criteria

Faculty will develop related course assignments and evaluation tools for student practical experience during the 2007-2008 academic years. Student evaluations and testing will provide feedback as to the usefulness of this learning experience at the end of each course and clinical experience. Additionally a specific questionnaire will be developed for this specific piece of equipment for feedback as to how the student was prepared prior to attending the hospital rotation.

20. Review and Acknowledgements

Dr. Lynda Goodfellow, Chair, Division of Respiratory Therapy

Dr. Susan J. Kelley, Dean and Professor