FY 2006 Technology Fee Proposal

Submitting Organization:
    Major Unit: College of Health and Human Sciences
    Department: Institute of Public Health

Contact Person: Carolyn C. Kee, PhD, Associate Dean
    E-Mail: ckee@gsu.edu
    Telephone: (404) 651-1582

1. Project Short Title

   Student Epidemiology and Informatics Research Lab

2. Total Requested

   Fiscal Year 2006
   $ 29,500

3. Executive Summary

   Project Description (three or four sentences)
   This project provides for the establishment of an epidemiology and informatics research lab to support the graduate studies of public health students. The research lab will provide a venue for graduate students to become competent in the collection, integration and analysis of large data sets and the robust presentation of health information and decision tools to support population health science, promotion and policy activities. Additionally, the lab will support students in developing research publications and conference presentations and partnering with local public health agencies to do needs analysis, health planning and evaluation.

4. Project Description

   This project provides for the establishment of a small epidemiology and informatics research lab for use by graduate students in public health. The graduate public health program has been fully operational for less than a year; some 40 students already are enrolled in the MPH program and another 75 students are enrolled in the Graduate Certificate program.

   Epidemiology, biostatistics and informatics (which includes geographic information systems and use of information technology to promote health) are core prevention science components of public health education. The prevention sciences track of the MPH program is the most heavily subscribed of the three graduate tracks. Graduates must exhibit significant knowledge in “collection, storage, retrieval, analysis and interpretation of health data; concepts and practice of statistical data analysis; distributions and determinants of disease; disabilities and death in human populations; characteristics and dynamics of human populations; and the natural history of disease and the biological basis of health. (Institute of Medicine, 2003) This important knowledge-base and skills set must be developed and refined working with large data sets and a range of statistical and informatics packages.

   To support this work, this project would provide students with 5 high-powered desktop computers, a large mapping/presentations printer and a smaller graphics printer. (This kind of sophisticated equipment is almost impossible for students to access on their own, outside the university environment.) All hardware and peripherals would be placed in the student research room of the
Institute of Public Health (presently under renovation/construction in Urban Life Building) and hardwired to the network. This secure structure and environment would allow students to work with certain unique public health data sets that would not otherwise be available to them. Software (ESRI, SPSS, SAS, EpiInfo, etc.) are available through university site license or are in the public domain.

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

| IS&T: IST06-061 |
| Facilities: 13631-05 |

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 programs.

In funding this project, technology fees will be used for the direct benefit of students in meeting educational objectives of the Master of Public Health (MPH) degree and the Graduate Certificate of Public Health programs.

[3] Technology fee revenues should be used for hardware and Network related expenditures that include support of general purpose or special purpose laboratories used by students for body productivity and more discipline related activities.

This project seeks funding for hardware to support specialized laboratory learning for the public health discipline.

[4] Technology fee revenues may be used for training of students and, to a lesser extent, staff and faculty.

For this project, technology fees are used to train students in epidemiology, biostatistics and informatics.

7. Relevance to Strategic Plan(s)

This project is relevant to the CHHS strategic plan in several areas, including:

1. Teaching. Goal 1. To foster the innovative use of technology in teaching.
2. Students. Curriculum. Goal 1. To provide students in the college with courses that assure competence and leadership in core areas.
3. Students. Recruitment/Retention. Goal 2. To create an overall environment in the college that is conducive to student academic, personal and professional development.
4. Research Space. Goal 1. To obtain adequate research space and facilities to support teacher-scholar activities.

8. Impact on Students Served

The project will support the graduate education experience and research activities of all students enrolled in the MPH degree program (by 2006, estimated to be approximately 100 at any given time) and the Graduate Certificate of Public Health program (approximately 80 students). The research lab will be accessible during all hours when the Institute of Public Health is open. Faculty epidemiologist (Okosun) will provide training and supervision for students. Other faculty and researchers from CHHS and other colleges will be engaged based on subject matter expertise. The research lab also will provide a secure venue for students to work with confidential public health datasets and epidemiological research projects with the State Department of Public Health.
Provide a specific description of the funding requirements for FY 2006 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.”

The proposed budget provides for 5 high-powered desktop computers, a large mapping/presentations printer and a smaller graphics printer.

<table>
<thead>
<tr>
<th>Object of Expense</th>
<th>Itemized Descriptions</th>
<th>Quantity</th>
<th>Per unit price</th>
<th>Extended Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplies</td>
<td>Dell Precision 670, 2.8 GHz with capacity and peripherals</td>
<td>5</td>
<td>$2,500.00</td>
<td>$12,500.00</td>
</tr>
<tr>
<td></td>
<td>to process large datasets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HP Color Laser Jet 3700n Printer</td>
<td>1</td>
<td>$1,200.00</td>
<td>$1,200.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>HP Designjet 4000ps Printer</td>
<td>1</td>
<td>$12,600.00</td>
<td>$12,600.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>All available through state license</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance or Service</td>
<td>Service included in purchase price</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Contractual Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network Connections</td>
<td>Per IS &amp; IT #061</td>
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<td></td>
<td>$3,200.00</td>
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<tr>
<td>TOTAL</td>
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<td></td>
<td></td>
<td>$29,500.00</td>
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</tbody>
</table>
10. Consequences of Partial Funding

State what the consequences would be on the effectiveness and viability of the proposal if it were only funded in FY 2006 at the following percentages of the requested total:

**Only 75% funded**: The project would remain viable – but less useful for students due to diminished computer processing capability and lower printer resource capabilities. (The reduction would allow for only 4 desk tops with less processing power and memory and 2 printers without PostScript capabilities.)

<table>
<thead>
<tr>
<th>Object of Expense</th>
<th>Itemized Descriptions</th>
<th>Quantity</th>
<th>Per unit price</th>
<th>Extended Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplies</td>
<td>Dell Precision 670, 2.8 GHz with capacity to process large datasets</td>
<td>4</td>
<td>$2,100.00</td>
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<tr>
<td>Equipment</td>
<td>HP Designjet 4000 Printer</td>
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<td>$10,000.00</td>
<td>$10,000.00</td>
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<tr>
<td>Software</td>
<td>All available through state license</td>
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<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Maintenance or</td>
<td>Service included in purchase price</td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>Contractual</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Network Connections</td>
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<td>$2,700.00</td>
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<td></td>
<td><strong>$22,100.00</strong></td>
</tr>
</tbody>
</table>

**Only 50% funded**: The project would not be viable if only 50% funded.

11. Standard Dollar Amounts

In constructing the budgetary requests in Sections 9 and 10 above, computer workstations should be budgeted at the following levels:

The following desktop systems are the standard technology for Student Technology Fee purposes. Desktop systems exceeding this capability and price must be specifically justified:

1. Windows/Intel processors workstation, including monitor: $1,420
2. Apple Macintosh models: $1,520

The following types of equipment require justification over and above desktop systems. The following prices and configurations are standard for these types of equipment. Any deviation from these standards must be further justified:

1. Windows/Intel processors laptop: $1,780
2. Apple Macintosh laptop: $1,672
3. Personal Digital Assistant (PDA): $456
4. Tablet computer: $2,175

The project requires large desk top systems with dual processors, multiple GHz of memory and storage, and high end displays to allow graduate students to work with large public health datasets and complex analytical and mapping (ESRI) software. Computers are equipped with larger than standard processing, storage and display capabilities to allow secure and rapid work station management of significant population survey and health databases (e.g., N-
12. Standard Replacement Thresholds

All equipment being requested due to obsolescence or inadequacy of existing equipment must be itemized on the form provided in Attachment 3: Itemization of Equipment to be Replaced. Each item for which replacement funding is being requested will be in one of the following two categories:

- Not Applicable

13. Prerequisite, Non-Technology Fee Funding

- Not Applicable

14. Matching Funds

- Not Applicable

15. Staffing and Other Support Availability

- Not Applicable

16. Space Availability and Impact on Facilities

“Renovation is currently being done on the 8th floor of Urban Life and will accommodate the equipment for this proposal. Therefore, no pricing is needed from Facilities.”

17. Impact on Computing/Networking/Security Infrastructure

“Security: Install ISS desktop protection on all networked computers. Contact William at 1-1587
Software: All software listed has a campus license agreement.
Hardware: Standard workstation specification is the Dell Optiplex GX270. Will need to justify the Dell Precision workstations.
Network: Minimal network impact expected, 7 network connections estimated cost $3200”

18. Post-Project Assessment Criteria

- number of students using systems for epidemiology and informatics research
- number of students using systems to develop abstracts and poster sessions for conference presentations and publication

19. Review and Acknowledgements

This proposal has been reviewed and approved by:
Dr. Susan Kelley, Dean, College of Health and Human Sciences
Mr. Anthony Roberts, College Administrative Officer, College of Health and Human Sciences
Dr. Carolyn Kee, Associate Dean of Research, College of Health and Human Sciences
Dr. Michael Eriksen, Director, Institute of Public Health