

# College of Pharmacy Information Technology Vision Plan 2004-2005

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Submitted by:

David Fudell

Manager, College of Pharmacy Learning Resource Center

College of Pharmacy  
Information Technology Vision Plan  
2004-2005

## Introduction

Please note that, as requested by the ITAC Committee, this Vision Plan is a revision of last year's plan.

The College of Pharmacy, like most colleges and schools, devotes the bulk of its ITAC funding to maintaining an IT infrastructure that not only satisfies the needs of its faculty, staff, and students, but also encourages continued growth and reliance upon this infrastructure. However, in addition to typical IT demands, the College must also support an infrastructure that enables the continued utilization and enhancement of two-way and multipoint videoconferencing in our Cooperative Pharmacy Programs with sister System Institutions (UT-El Paso, UT-Pan Am, and the University of Texas Health Science Center in San Antonio).

Thanks to TIF and College funds, the College has completed installation of a third videoconferencing facility, upgraded cameras in its large room, and undertaken a major re-write of the complex amx control system that is the heart of the large room. ITAC funds are routinely used to support the distance education program as well as other IT infrastructure. This year's vision plan also requests funding for projects that continue to maintain and enhance existing facilities.

The ITAC fee is used each year to accomplish life-cycle replacement of laboratory computers, and this activity will continue.

The Ethernet network in the College is in good shape thanks to ITAC funds. Within the past year all Ethernet was upgraded to 100baseT. We would like to upgrade some users to 1000baseT, as noted in the funding request below.

Wireless computing came to the College during the 2002-2003 academic year, and it was warmly embraced. Not only does the wireless network facilitate greater access to University resources with wireless computing, it also enables a much safer environment, by way of less exposed wiring, in the many wet laboratories that researchers occupy in both the old and new Pharmacy buildings. These labs now have much greater flexibility in their configuration, and fewer Ethernet cables draped from computers to Ethernet outlets. While power is plentiful in most of these labs, Ethernet circuits were not. This year we request funds to upgrade the wireless system from 802.11b to 802.11g standard. We also request funds to establish wireless Ethernet at one of our remote locations, UT Health Science Center San Antonio.

## Current Status

The College of Pharmacy operates a full-time computer lab, a computer classroom (available until 3:00 as a General Purpose Classroom), and an audiovisual library that houses computers used for streaming video and general use as well as VCRs and DVD players:

<u>Room</u>	<u>OS</u>	<u>No. of Stations</u>
PHR 3.116	Win XP	19
PHR 2.116	Win XP	23
PHR 3.114	Mac OS X	8

Note that, thanks to a special ITAC appropriation last year, the 23 computers in PHR 2.116 will be replaced.

A third of the PCs in 3.116, the main computer lab, are replaced each year. At the time of this writing the standard complement of software included the Microsoft Office suite, web browsers (including specialized plug-ins for media types requested by faculty), A.D.A.M. software for studying anatomy, and a few other helpful utilities such as QuickTime. LabMan is used to manage the labs. Students also access Adobe Photoshop and Acrobat via a keyserver. Keyserving has brought a very cost-effective way to supply occasionally needed software to the College.

## Technology Auditoriums and Classrooms

The College of Pharmacy had one of the first Technology Classrooms on the UT Austin Campus. In 1997, when it was significantly remodeled to bring it to its current configuration, it represented the state of the art in distance education and computer-based teaching facilities on campus. Last year, the control system for the classroom was updated thanks to ITAC funds.

A second room, PHR 4.114, is a fully functional videoconferencing and computer-instruction space. It is, however, becoming rather dated both in terms of its furnishings and some of its equipment. This year, we request funds to purchase new cameras and architecturally update the space, including acoustic treatment in the ceiling, replacement of the literally threadbare carpet, and repair and reupholstering the aging seating.

A third room, PHR 2.208, has been added to the inventory of videoconferencing spaces. This completes the College's complement of video facilities: One auditorium-style large room, one auditorium-style medium room, and a compact boardroom-style facility.

Other rooms have received and will continue to receive audiovisual upgrades in an effort to increase utilization while decreasing demands on staff time. The College placed campus-standard Technology Classroom Consoles in three PHR-located General Purpose

Classrooms and has installed projectors and ancillary equipment, described below as PHR standard, in nearly all other instructional spaces.

Classroom Inventory :

Room Number	Capacity	Installed Equipment effective Fall '02	Gen'l Purpose
2.108	127	NS standard	Yes
2.110	133	NS standard	Yes
2.114	60	NS standard	Yes
2.116	45	Data Projector	~75%
2.208	20	PHR standard*	No
2.214	23	None (expected to be repurposed)	No
3.106	136	Full tech. classroom, not NS standard*	No
3.108	30	PHR standard (teaching lab)	No
3.110	30	PHR standard (multipurpose lab/classrm)	No
3.114A	10	PHR standard	No
3.114B	10	PHR standard	No
3.114C	6	Plasma screen only	No
3.114D	10	PHR standard	No
4.114	52	PHR standard*	No

\*equipped for two-way videoconference

## Networking and Associated Electronics

As discussed above, wireless Ethernet of the 802.11b standard has been provided throughout the old and new Pharmacy buildings. We expect to upgrade the system's transceivers to 802.11g standard this year.

Total number of Ethernet ports maintained by the College ----- 845  
 Number of static and dynamic IP addresses ----- 530  
 Number of 100baseT switched ports----- 817

## Departmental Servers

The College operates four servers for primarily administrative uses:

1. Mac G4, OS X - FileMaker Pro Server & Now-Up-To-Date: Users and server migrated from older versions.
2. Mac G3, OS X - FileMaker Pro Unlimited - Instant Publishing.
3. Mac G3, OS X - FileMaker Pro Unlimited - Dedicated (i.e., non-instant) Publishing,
4. Mac G3, OS 9.2 - FileMaker Pro running Dragon, an online survey tool,

In addition, two video servers and a large RAID array are used to publish streaming video to our audiovisual library and feed the video caches installed in our San Antonio and El Paso sites:

1. Mac xServe, OS X Server - QuickTime/MPEG4. Streaming Server, Apache Web server
2. Mac xServe, OS X Server - Netinfo/WINS Server, Backup server using tape array

Finally, three servers are used for file storage and Labman. Note that the Labman server is aging and a replacement is requested below:

1. Mac xServe, OS X Server
2. Dell PowerEdge 2400, Windows 2000 Server - Labman and Application server
3. Dell Optiplex GX110, Windows 2000 Server - College Accreditation FTP Server

### **Portable Projectors and Notebook Computers**

Although the College's has installed instructional technology in every dedicated classroom, we still maintain a complement of portable equipment for checkout by faculty and for use in classroom spaces elsewhere not yet equipped with installed equipment.

We continue to provide laptops to students, faculty, and guests giving presentations. In an effort to facilitate the presentation process a pool of 'pen drives' has been purchased and made available to faculty and graduate students. Furthermore, we have (with Liberal Arts Media's blessing) modified the Technology Classroom consoles to accommodate the USB-based pen drives and Liberal Arts has used our USB installation as a model for modification of their consoles.

### Specific ITAC Funding Requests

1. Establish video cache in Edinburg ----- \$20,000  
TIF funds provided a Network Appliance cache for our El Paso and San Antonio sites. This purchase will complete the installation to each of our remote sites.
2. Remodel/upgrade PHR 4.114 ----- \$50,000  
PHR 4.114 is a two-way videoconferencing facility and general teaching space that seats about 50, making it Pharmacy's medium-sized facility of this type. The room's furnishings are quite worn and the chairs are in a bad state of repair. The video equipment is also quite dated. Upgrading the cameras to the same type as those in our largest videoconferencing space will enable shared control equipment, far higher picture quality, and an automatic tracking system for the instructor.
3. Continue life-cycle replacement of lab PCs----- \$20,000  
As long as upgrades accomplish appreciable gains in computing power we will continue three-year life-cycle upgrades.
4. Data network projects----- \$12,000

This request includes funds for new switch purchase to accommodate increased demand; upgrade of wireless Ethernet to 802.11g standard; and an upgrade of 24 ports to 1000baseT.

5. New server for Labman----- \$6,500

6. Classroom technology maintenance/upgrade ----- \$20,000

Some computers and projectors installed in classrooms are ready for life-cycle replacement.

6. Convert PHR 3.106 video to SDI (digital) video standard----- \$40,000

TIF and College funds have paid for the cameras, but the entire signal chain must be converted as well, including routing amplifiers, switcher, scan converter, distribution amplifiers, etc.

Total requested----- \$168,500

## Appendix: Staffing

A breakdown of College of Pharmacy staff who directly support IT at the College:

Senior Systems Analysts, 2 FTE -----	College student fees
Senior Systems Analyst, 1 FTE-----	Administrative funds
Systems Analyst, 1 FTE -----	Administrative funds

Note that other staff within the College provide support for IT functions but not as a first priority. These include an FTE for audiovisual services, an FTE for video services, the LRC Manager, and an FTE who provides administrative support to all.