

# IT TIMES

Winter 2007

## Spurred by ‘Frontiers,’ campus looks into creating its own TV studio

The new Web TV show “Frontiers” will help raise the profile of research and scholarship done by UC Davis faculty. It could also help the campus land a permanent TV recording studio.

“Frontiers,” produced by University Communications and IET-Mediaworks, is a half-hour public affairs program that started webcasting on [www.ucdavis.edu](http://www.ucdavis.edu) in November and should debut on UCTV this month. Initial guests range from chemist Matt Augustine to artist Malaquias Montoya.

The program will also air on public TV. The production values aim that high,

which—along with displaying good work by campus luminaries—is part of the point.

The show got started when University Communications and Information and Educational Technology set out to create a webcast program, said Susanne Rockwell, a senior public information representative and the associate producer of “Frontiers.” After recording lectures and talks by distinguished visitors in “horrible rooms with bad lighting,” they realized they would get better results with their own set.

“Frontiers” landed in Wyatt Pavilion, with the first segments created last summer. The show is recorded on a thrust

stage in 100-year-old Wyatt, an original campus structure built as a livestock judging hall and converted into a small theater in 1963. Conditions are better there, but still not ideal, said Paul Ver Wey, manager of Media Services for Mediaworks and stage manager for the program.

Wyatt is available only part of the week, setting up takes several people five hours, and train sounds from the nearby



**Mediaworks Producer/Director Bert Craig assists Associate Professor of Sociology David Kyle, left, and Law School Associate Dean Kevin Johnson at a taping.**

Union Pacific railroad intrude on the recording.

“Ideally, we would like to record in a television studio,” Ver Wey said. “A studio

**See Frontiers, page 4**

## The NIGHT CREW

**They work late to keep classroom media humming ...and they’d really like to see less chalk dust**

It’s 6 p.m. on a Wednesday in November, and the five technicians on today’s night crew are meeting inside Surge II to get their next assignments. The “hot list” of repairs has only two items, media maintenance supervisor Bruce McCaskie tells them, so the shift looks quiet.

But that’s not to say the crew won’t find a surprise or two when they fan out through the classrooms. They have before.

If you never work late on campus, you never see the classroom tech night crew. But if you teach or study in any of the 119 general assignment classrooms on campus, you rely on their skills. This group keeps the tech side humming. They’re the staff technicians and students who help install and maintain the media cabinets, networked projectors and other high-tech tools that have become staples of university teaching.

“One reason UC Davis has such a remarkable record [in classroom tech reliability] is the upkeep done by the night crew,” says Jan Dickens, who oversees IET-Classroom Technology Services (CTS). “It helps keep defect time to an absolute minimum.”

The crew works after dark because that’s when the classrooms are free, and mostly works alone. They check systems, use platforms that lift them 20 feet above the floor, answer hotline calls for evening classes, and occasionally chase off people trying to use an empty classroom as a private theater—or worse.

And they fight chalk dust. Don’t snicker, it’s not trivial. Follow a couple of the technicians around for an evening and you’ll see why.

**Applause for rescuing a lecture**

The crew usually has nine people, although five are working tonight: staff technicians Lamar Veasey and Virgil Castro, and students Ryan Coates, Adam Kreger and Khanh Nguyen. The shift starts with a meeting in a large, crowded back room in Surge II that McCaskie calls “the shop.” The students will knock off at midnight, the rest at 2:30. It’s the same every weeknight.



**The crowds are gone, along with the daylight, when the classroom technicians head out in their GEM during the winter.**

In the meeting, McCaskie goes over the day’s updates. Then they discuss the work and head out. One of them visits each classroom at least once a week, so even on nights with few repair orders, the crew has plenty to do.

Veasey, who came to this job more than six years ago from an audio-visual company, starts tonight in Chem 179, a steep lecture hall with about 140 plum-colored chairs. He walks down to the front, inserts a DVD into the media cabinet—the techs carry their own discs and videotapes for testing—and begins examining connections, checking speakers, blowing out dust, wiping down cords.

The maintenance will take him about half an hour, and he’ll repeat the pattern in the other classrooms he’ll visit tonight.

When Veasey started working for CTS in 2000, if a room’s slide and overhead projectors worked, the class functioned just fine. Since then, the tools have become more sophisticated and more essential, and when they don’t work, instruction can stall. “Eighty percent of classes will stop if the media cabinet isn’t working,” he says. The slide projectors sit largely unused, displaced by PowerPoint.

When Veasey answers a hotline call, sometimes the students will applaud when he

rescues a lecture by reviving a failed screen link. The clapping embarrasses him a little, because the task feels simple to him.

Of course, it feels simple because he knows what to do when the equipment balks. Instructors often don’t have that advantage.

Says Veasey, “That’s why they have us.”

**Mellow, but effective**

Castro, assigned to the Art Building tonight, started working for CTS when he was an engineering student on campus. Now he studies design at Sacramento City College. He’s had the job about as long as Veasey has.

“I like the technology. Sometimes it can be a little bit monotonous, but that doesn’t last long,” Castro says. “There’ll be new technology, or something broken. Plus, when you’re working you feel like you’re somewhat your own boss.”

He likes his coworkers. “It’s a very mellow atmosphere, easygoing.”

Mellow, maybe, but since the “hot list” rarely runs a temperature, the maintenance drill seems to work.

In the spring quarter, the night crew logged 1,610 classroom maintenance visits, checking 12,205 pieces of equipment. Ninety-one percent of the total visits were scheduled maintenance, says a CTS quarterly report. The other 9 percent were

**See Davis at night, page 2**

## Here, have an iPod: Tech shapes art at Mondavi Center



**by Don Roth**

*Editor’s note: The popular image of technology is that it has little to do with the arts. That image has never been true—and new forms of technology continue to transform both the expression and experience of art. A dance performance scheduled next year at the Mondavi Center, for instance, will invite audience members to listen to an accompanying score on an iPod shuffle during the show. We asked Don Roth, who runs the Mondavi Center, for his thoughts on the subject.*

I appreciate the opportunity to write in *IT Times* about the ways in which technology impacts our world over at the Mondavi Center and in the arts everywhere. Specifically, technology has had an enormous impact on our ability to reproduce and disseminate art; it can provide new methods to help us better appreciate art; and it can be used, as well, in the actual creation of art works.

Here, in a nutshell, is how technology and art intersect.

**Reproduction and dissemination**

Since Edison, the impact of reproduced sound and images has had a major influence on the arts. Artists can hear and see the works of previous generations of musicians and choreographers, allowing influences to pass across miles and years in ways that were never possible in the past. Technology not only makes it possible to record and reproduce performances, but also to disseminate them to an ever-widening audience. Now, with the Internet and satellite radio, even audiences with very specialized “niche” tastes can find whole sites and stations devoted to those interests.

All of this has a powerful and positive impact on live events, giving artists without enormous resources an opportunity to build a following.

**Appreciation**

The power of computer technology has only begun to be exploited as a way to enhance the experience of live performance.

**See Mondavi Tech, page 4**



Davis at night (from page 1)

for “specific reported equipment or system issues.”

Good record-keeping minimizes problems. Back in the shop, the crew tracks details such as the age of projector bulbs, so CTS has replacements in stock when a bulb burns out. (You don’t want to replace them early; some bulbs cost hundreds of dollars.) The techs can also call on tools ranging from heavy-duty drill presses, so they can customize fixtures, to hydraulic lifts that let them get their hands on a ceiling-mounted speaker.

And there are annual chores. Once a year CTS uses a high-pressure sprayer—it sprays water at a force of 3,000 pounds per square inch—to blast chalk dust off the projector carts. “The dust is extremely hard to get detached from the plastic surfaces,” McCaskie says. Afterwards, the crew applies a coat of silicon spray so the next doses of dust won’t stick as badly.

That’s important, because in classroom tech, chalk is as welcome as noise in a reading room.

Sometimes the crew finds dust a quarter-inch thick in the chalk trays. It doesn’t help that the media cabinets typically sit near the chalkboard at the front of the room.

Says Coates, “I spend half my time cleaning chalk dust out of machines.”

Shifting to whiteboards would fix that, but many instructors insist on chalk, and whiteboards present their own problems. They can be hard to keep clean, markers

wear out or get pocketed, and some people are bothered by the fumes. Plus they’re not traditional.

“Chalkboards are popular,” McCaskie says. “I don’t think that’ll ever change.”

Dungeons & Dragons in Wellman

Working near midnight means the night crew comes across surprises now and then. The most common is people hanging out in a classroom, using the screen to watch movies or play games. They get shooed out.

Castro once came across a group, ranging from high schoolers to adults in their 40s, playing Dungeons and Dragons in a half-dozen rooms in Wellman. The players didn’t care about the technology; they simply wanted space.

Sometimes the poaching is less innocent. One man was caught downloading movies through a classroom media cabinet—he was recording them on his own desktop computer, which he had rolled in on a cart. CTS has stopped that kind of abuse by removing the IP (Internet) addresses from the outside of the cabinets.

More night than last year

The night crew is working later these days. Until 2006 the shift started at 5 and ended at 1. But most general classrooms are occupied until 8 p.m.—an hour later than in 2005-06, and a sign of the campus’s growing enrollment. So CTS moved the shift back an hour.

Between the volume and continuing spread of high technology, the night crew should be busy indefinitely. CTS expects to add another five classrooms to its roster soon, with more to follow.

“Yeah, we’re kind of

happy about that,” McCaskie says.

Then he gets in one more word about chalk dust.

“We’re hoping,” he adds, laughing, “maybe they’ll install supersize Etch A Sketches to get rid of the chalkboards.”

For more information on technology in classrooms, go to [iet.ucdavis.edu/rooms](http://iet.ucdavis.edu/rooms).

Working near midnight means the crew comes across some surprises now and then



Photo: Gabriel Unda

Lamar Veasey chats with another member of the crew. They keep in touch to field service calls and other issues that develop during the shift.

A finely ground irritation

A stick of chalk wears down with use, but the fine powder it creates hangs around, drifting into keyboards or clogging equipment. When the powder scatters it gets sucked into projector filters, increasing the risk of expensive damage from overheating. “It’s almost problem No. 1,” McCaskie says.

Med School’s new home is wired for live, interactive learning

UC Davis medical students have a large new home, the Education Building and F. William Blaisdell, M.D. Medical Library. At more than 121,000 square feet, the building becomes the center of activity and education for the School of Medicine, and houses everything from offices for the dean to lockers for med students.

But its classrooms are very different from most on the main campus. Although the three types of classrooms in the new center have different uses, they share a versatile video communications network and help the school shift its instruction toward interactive

learning done in small groups.

Two types of classrooms have similar equipment. The first type is auditorium-style (seating 60 students in some and 150 in others); the second is smaller, seating 12, 16, or 30. Like general assignment classrooms on the main campus, these rooms can play video and DVDs, as well as synchronize media from a lecturer’s laptop.

Here’s the difference: In the new building, students and faculty in any of these rooms can see and hear what is happening in another classroom, including audio-visual content. Each room has

STUDENTS HELP EXPAND WIRELESS ZONE

Thanks to collaboration between Information and Educational Technology (IET) and student government, some popular student hangouts gained wireless Internet access in 2006. More additions are in the works.

Last school year, in a meeting with senior officials of IET, representatives of the Associated Students of UC Davis lobbied for more wireless access on campus. Part of the campus was already covered, but some logical expansion sites in high student-traffic areas had been stuck on “pending” because money to make them wireless wasn’t available.

ASUCD representatives were interested in better coverage on the Quad and on the first two floors of the Memorial Union. IET and ASUCD decided to pool resources to improve wireless in these areas. The student government allocated \$12,000 to IET toward that goal.

“Thanks to ASUCD’s generous donation, more sites are going to have wireless coverage,” said Zack O’Donnell, client services manager for IET-Communications Resources. “Our wireless design for the Quad improved coverage with fewer devices than originally estimated. Now, with this extra equipment [available], ASUCD has authorized installations in the Rec Pool Lodge, South Silo patio, and Olson basement.” Work on the additions should begin this school year.

For a map of wireless areas on campus, go to [wireless.ucdavis.edu/maps.cfm](http://wireless.ucdavis.edu/maps.cfm).

Outfitting the entire campus with wireless would cost millions of dollars. The Campus Council for Information Technology (CCFIT) has been setting priorities to take on the expansion one step at a time. CCFIT is working on the charter for a subcommittee responsible for establishing priorities and advising Pete Siegel, vice provost for IET and chief information officer, on which areas of campus need wireless access the most.

“As the campus grows and changes, so will the subcommittee’s priorities,” said Matt Bishop, computer science professor and chair of the CCFIT Wireless Task Group. “As funds become available, the administration can use the priorities to deploy wireless as effectively as possible.”

For more information, go to [ccfit.ucdavis.edu/wireless](http://ccfit.ucdavis.edu/wireless).

GET FREE SOPHOS ANTI-VIRUS SOFTWARE

Sophos anti-virus software is now available for free to all departments, faculty, staff and students for use on their home or university-owned machines, thanks to a new campus licensing agreement. One caution—the deal does not cover the UC Davis Health System, which has a separate agreement with McAfee for anti-virus software.

Sophos may be downloaded from the campus software Web site ([software.ucdavis.edu](http://software.ucdavis.edu)), and will be available on the next release of the Internet Tools CD.

The agreement with Sophos will help protect servers, desktops, laptops, and handheld devices from viruses for five years, said UC Davis Software License Coordination.

There are some caveats. The product for handhelds was not available as of

mid-December, and users should uninstall any anti-virus product currently running on their systems before installing Sophos. For more information, go to [software.ucdavis.edu](http://software.ucdavis.edu) and click on “anti-virus” in the “categories” column on the left of the page.

Sophos PLC, based in Abingdon, U.K., makes security software for customers worldwide.

SMARTSITE KEEPS GROWING

SmartSite is still a pilot project, but it’s starting to draw the audience of a mainstream attraction.

The course management system, which creates new places for people at UC Davis to teach, learn and work together online, attracted more than 2,000 new users during the fall quarter. As of November, it had registered:

- 2,945 unique log-ins, up about 200 percent from July.
- 585 project sites, up 27 percent.
- 227 course sites, up 81 percent.

“And that’s without really pushing,”

said SmartSite program manager Kirk Alexander. The big campaign to get more of the campus to adopt the system will come in spring 2007. The project emerged as a pilot in late spring 2006.

SmartSite, profiled extensively in last summer’s *IT Times*, offers an easy-to-use, extendable set of tools based on Sakai open-source software shared and developed by more than 100 universities and colleges.

UC Davis faculty, researchers, students, and staff can use the tools to do anything from post a reading list to collaborate on an assignment or, in a music appreciation class, track the sound of a flute in a recorded symphony concert. It can archive chat-room discussions and make various types of material securely available online—to as many people as the user wants.

SmartSite also gained new features in the fall quarter, Alexander said. They include tools for podcasts, blogging, handling email, interfacing with iTunes, a discussion forum and SiteStats (a tool to collect data in real time by user, event or resource). The Gradebook and Quiz & Test tools continued to improve, making them more suitable for large classes.

SmartSite offers two basic types of sites: class sites, to organize classes and offer new ways for students to work together, and project sites, which can be used to organize work by individuals, clubs, researchers, research groups, and other campus organizations not directly connected to a campus class. Instructors have created sites in both the arts and the sciences, for classes with up to 450 students so far.

The campus will use SmartSite to replace the more limited set of course management tools in the MyUCDavis Web portal starting in 2007-08, followed by the shutdown of the MyUCDavis course tools a year after that. The UC Davis School of Veterinary Medicine has already adopted SmartSite, which it calls CERE (“Collaborative Educational Research Environment”), for all its courses.

The Teaching Resources Center continues to teach classes about SmartSite; check [trc.ucdavis.edu](http://trc.ucdavis.edu) for details. To learn more about SmartSite, go to [smartsite.ucdavis.edu](http://smartsite.ucdavis.edu).



“It is a gorgeous building”  
—Rick Springer

microphones and a wall-mounted camera. Users can confer live by video throughout the classrooms.

The remaining eight “classrooms,” in the building’s Clinical Skills and Assessment Center, are mock exam rooms designed to look and feel like a typical doctor’s examination room. Each has two ceiling-mounted cameras and two microphones to digitally record the simulated exams.

The building will significantly improve the dynamics and quality of medical

education at UC Davis, said Ann Bonham, a professor of pharmacology and internal medicine, and executive associate dean for academic affairs for the UC Davis Health System.

First, it unifies medical school classes in one location, instead of having some taught in Davis, some in Sacramento.

“Secondly, the new building is a dramatically improved venue for education. Our large lecture hall is now state of the art, with comfortable seating and



PROXY FIREWALL INVENTOR TO  
KEYNOTE IT SECURITY SYMPOSIUM

The campus has lined up Marcus Ranum, who invented the proxy firewall, as the keynote speaker for the third biennial UC Davis IT Security Symposium in June.

Ranum is chief security officer for Tenable Network Security, Inc. of Columbia, Md., which sells security management tools and services for networks. His experience in security includes stints as a developer, founder, chief executive officer, and consultant for Fortune 500 companies.

The UC Davis symposium, designed for system administrators and other technical professionals, presents practical ideas for improving computer and network security at universities. Past symposia have included hands-on instruction and technical discussions, plus chances for networking.

The 2007 symposium will meet on campus from June 20 through June 22. For information, go to [itsecuritysymposium.ucdavis.edu](http://itsecuritysymposium.ucdavis.edu). Planning for the symposium has begun, and more program and registration details will be posted at the site as the plans develop.

Firewalls help protect databases by examining aspects of data moving across a network to see if it should be granted access to the database. Proxy firewalls look at the content of data, not just the source and destination, and can include other security measures as well.

IET WEB PAGE REVAMPED

When Information and Educational Technology rebuilt its Web site about two months ago, the department focused on creating a more service-oriented, user-friendly site. The results are in.

Now, if you visit the main campus tech Web site at [iet.ucdavis.edu](http://iet.ucdavis.edu), you'll see a page resembling the main UC Davis site with an updated navigation bar, a department-wide search engine, announcements about campus tech, and photos linked to stories that will change throughout the year. Changes also include a "How do I ...?" feature for common questions and a sidebar devoted to TechNews, IET's online source of campus tech news and information.

"We're trying to organize it the way our customers want to find things, not around how IET is organized," said IET Vice Provost Pete Siegel. The site brings all IET services under a common template. The department invites feedback at [ietweb@ucdavis.edu](mailto:ietweb@ucdavis.edu).

HOLD OFF ON INSTALLING VISTA

Microsoft's new operating system, Windows Vista, offers many new features. But Information and Educational Technology (IET) recommends that UC Davis departments and technical staff postpone installing it on existing campus machines.

UC Davis is not alone in advocating a slow rollout. A recent CDW Corp. survey of information technology decision-makers found that 86 percent plan to upgrade their systems to Vista, but only

20 percent intend to make the change during Vista's first year.

The UC Davis campus has to consider such factors as integration and compatibility with major campus applications and systems, plus software and compatibility with third-party hardware and software.

Also, Vista requires more processing power, more memory, and a more powerful graphics card than the Windows XP operating system, its predecessor. A report released by Softchoice Corp. revealed that half of North American business computers don't meet the minimum requirements of Vista, and 94 percent can't support the full premium configuration.

Microsoft released Vista to business, government, and education users in late November, and expects to release the system to the general market late this month.

Because the campus will eventually use Windows Vista, IET advises departments purchasing computers during the next several months buy machines with Vista already installed. (Any computer that meets the campus computer ownership standards will support Vista.)

Early Vista users might experience some compatibility issues with campus uses, and IET is testing Vista to see how well it works with major campus applications. Information and advice about Vista will be posted this month at [vista.ucdavis.edu](http://vista.ucdavis.edu) and will include test results, frequent questions, discussion of enhanced Vista security features, documents, and other resources.

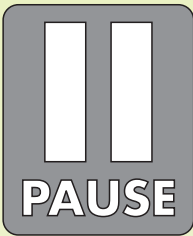
Windows XP remains supported by Microsoft Corp. and IET, so campus users don't have to start using Vista to meet campus cyber-safety standards. If you have questions, please contact the IT Express Computing Help Desk at (530) 754-HELP.

CAMPUS DIRECTORY UPDATES

If you need to correct your campus directory information, expect to hear more soon about a new online process that students, employees and faculty will use to update their entries in both the printed and online UC Davis and UC Davis Health System Directory. The procedure was introduced without fanfare in December, with an informational campaign to follow this month.

The process is part of the White Pages project. Until now, updates for the campus print directory were collected from several data sources and typed into the system. The work was laborious, paper-heavy and prone to error. The new process lets employees update their own information over the Web. The goal is to improve both the procedure and the resulting directory.

For updates and information, go to [middleware.ucdavis.edu/listings.php](http://middleware.ucdavis.edu/listings.php).



**"We're trying to organize it the way our customers want to find things, not around how IET is organized"**  
**—IET Vice Provost Pete Siegel, on recent changes to the department's Web site**

More items, less jargon—  
welcome to TechNews '07

IET senior writer Bill Buchanan starts writing a quarterly column with this issue.

Ever heard of TechNews? Not really? You're far from alone.

For a site that was launched in 2003 ([technews.ucdavis.edu](http://technews.ucdavis.edu)) to inform the campus about campus technology, it hasn't achieved the reach or consistency that it should. TechNews does pretty well in overall visits, and has often carried useful items not available anywhere else. But promotion of the service has been modest, and sometimes nothing has been posted to TechNews for weeks at a stretch.

So that's the history. Here's the news: TechNews has changed. We here in Information and Educational Technology have rebuilt the service. We have overhauled its architecture to improve its access and appeal, made it easy to receive news feeds, and have set a goal of posting news and useful information at least two days per week—more when times are fat.

That's the start. If we really get this thing going, we'll add opportunities for reader comments, blogs, and whatever else we dream up that makes sense. All to make TechNews more reliable, useful and engaging.

Exclamation mark warning!

Notice, please, the realism of that target. One of my goals as TechNews editor is to resist puffery and clichés. We deliver good material, drawn from the many corners of campus tech. But I don't want to bludgeon you with a Promise! To Keep You! Fully Informed! About Everything Relevant to Campus Tech!

The site doesn't need to be that grandiose to be worth your time. TechNews will draw on the resources of dozens of people, not always in IET, who have news and information about campus tech that faculty, students and staff should know. That's our beat. No other publication covers it.

We've tested our improvements, and have watched visits to the site increase. The tryouts have included daily reports from last July's Summer Institute for Teaching and Technology, news about free research software for everyone on campus and the spread of "clickers" in classrooms, and a Web-only story about the stunningly detailed photos produced by a new piece of equipment on campus. (Read Stevie Jeung's story about the "Better Light" camera hybrid in the IET archives.) We added an RSS feed in the fall.

That's on top of the security alerts and other material that TechNews has carried all along.

My role in all this is to oversee TechNews, plus write or edit some of its entries. I work from a desk in the Information & Events corner of the ex-Pacific Standard Life Insurance building in southeast Davis. I also help edit *IT Times*, write other articles, assist other publications, supervise students, and do



by Bill Buchanan

other assorted tasks. (We are a flexible bunch, over here in our corner.)

As common as lights on your ceiling

We're beefing up TechNews because campus tech is not a separate activity cordoned off in a building or two, run by and for people who speak in code.

Well, OK, part of it is. But high tech now permeates the campus. Information about campus tech needs to do the same, in the plainest language possible.

Tech has become a tool to assist any piece of campus business from recording grades to reviewing dissertations. From research to ...

...well, surely there's no need to write a list. I might as well expect you to need me to recite the alphabet. Tech is that established.

And really, the spread of tech into everyday work is nothing new. Tools like wikis and wi-fi are simply following the path blazed by telephones, electricity, driving, and email. When tech tools are useful, they become so thoroughly integrated that they lose their freaky, baffling technological identity. When's the last time you thought of an electric ceiling lamp as tech? But that's what it is.

(Let's not forget the initial wonder, if not confusion, that all new tech creates. My late grandmother, born in 1894, told me her small town in Iowa was dazzled when the town utility began offering electric lighting at home. She was in school. The ceiling light in her home had no light switch—all the house lights in town were controlled by a central switch down at the power plant. The plant operator turned the lights off at something like 9 p.m. No one minded; just having the light was stunning.)

Miracles become blasé in time. Someday we'll judge wireless Web access to be as ho-hum as the bank of fluorescent lamps above my desktop Dell. I expect the Class of 2010 already thinks that way.

Look, we'll make it really easy

But my purpose today is not to predict. My purpose today is to invite you to check out TechNews, to offer you another window on events on your campus.



sign up, go to [technews.ucdavis.edu](http://technews.ucdavis.edu) and click on "subscribe." You can also sign up for an RSS feed there.

You can get TechNews headlines by email every Monday. To

We'll even pull back the drapes for you. Sign up for the weekly TechNews email at [technews.ucdavis.edu](mailto:technews.ucdavis.edu), and we'll send

you items every Monday morning.

We define tech broadly. TechNews items are as likely to touch on teaching as they are to report on profiling tools that can put metrics on .NET applications. More likely, in fact.

Read it. Use it. Critique it. Tell me about it at [wrbuchanan@ucdavis.edu](mailto:wrbuchanan@ucdavis.edu), or call (530) 754-5466.

*Bill Buchanan is a senior writer in the Information & Events section of Information and Educational Technology, the main campus tech department and the publisher of IT Times.*



\$46.2 million building was dedicated December 11 at 45th and X streets in Sacramento.

advanced [audio-visual] tools, but more importantly, we have many more smaller, A-V-equipped classrooms," she said.

"Medical education is shifting away from heavy reliance on didactic lectures in large auditoriums to more interactive learning experiences in small group settings where patient case-based problems can be explored," Bonham said.

Rick Sprunger, a senior development engineer and supervisor in IET-Classroom Technology Services, helped advise the school on what A-V equipment to buy, helped choose the contractor who installed the complex system, and acted as a general consultant.

"The whole idea of the building was to have the technology set up so that you could move the signal around from room to room," he said. "You could be in one room and look in on other activities that are taking place in the building, either in real time or from the archives."

CTS has posted a full-time technician at the building to provide ongoing support for the technology. The building also enjoys a modern library, named for professor emeritus Blaisdell, and a central location on the medical school campus.

"It is a gorgeous building," Sprunger said.



# Spam & Email

## Structural changes ease stress of record volume

September was a busy month for the administrators who oversee UC Davis’ email system.

The team had worked hard to accommodate the demand anticipated as the campus enrolled its largest incoming freshman class ever. And, as expected, the email load became extremely heavy beginning the week before classes started.

The team monitored the system. The load continued to be heavy in the following weeks, leading to record volume. (Spam, to no one’s surprise, was a big culprit—see related article.) To address the problem the team met with campus leadership, including the Academic Senate, to discuss implementing previously developed spam-blocking measures.

Although the system saw temporary slowdowns in late September, the email load stabilized after the early spike, as it often does after the start of a quarter. The team continued pursuing the email enhancements already slated for the 2006-07 academic year, which, in addition to spam-blocking measures, include a new proxy service, finding a replacement for Geckomail, replacing Listproc, testing a new “back end system,” and many other improvements.

### Nearly 50,000 campus email accounts

IET’s Data Center and Client Services department manages close to 50,000 email accounts, which receive an average

of 2 million to 3 million emails per day. Of these, more than 800,000 were routinely identified as “most likely spam” by the campus spam assessment software. The high percentage led the campus to implement new spam measures.

Meanwhile, to keep up with the needs of campus email users, Data Center and Client Services has had to continuously improve the system and anticipate the next critical hardware and software updates. Despite careful planning, the system can often take unexpected turns. The current email load, for example, was not expected for at least another year.

For 2006-07, the emphasis is on making improvements behind the scenes and replacing some of the aging software systems.

### Proxy service allows load balancing

One major improvement to the email system during the fall quarter was the addition of a proxy service to the email system.

Before the service was introduced, email accounts were essentially fixed in place among a collection of individual servers named after colors—blue, azure, tan, etc. If the load on one server became high, there was little administrators could do to spread the load unless they wanted the account holders to change their settings and move to a less busy server. That change, though, would delay access to the email account, and old messages might get lost in the transfer.

The proxy service lets administrators balance loads without users having to

## New filter has slammed spam

The campus stepped up its fight against spam last fall when it turned on a new filter system designed to reject hundreds of thousands of spam messages each day. Initial results show the strategy is working—on Dec. 6, one week after the system launched, it rejected 1.02 million pieces of spam before users ever saw them.

The changes, described in a Nov. 16th directive from Pete Siegel, vice provost for Information and Educational Technology, apply to everyone who receives email through the campus email system.

The campus scores each email message according to factors that typically define spam. Starting Nov. 29, messages that score extremely high are no longer delivered. Messages with a moderate score get sent to temporary holding folders (UCD-spam folders), where the recipient has two weeks to read or retrieve the messages before they’re discarded. Emails with a low score reach the user as usual.

“Technically, we were not blocking

high-scoring spam, we were just shipping it off to a quarantine folder,” said Jatinder Singh, program manager for the UC Davis email system. Recipients could see the quarantined messages by opening the folders; the messages did not appear in their inboxes. Meanwhile, spam’s load on the email system was becoming intolerable.

“From what I’ve seen,” Singh said in mid-December, “that load has gone down about 40 percent.”

There were two key reasons for the changes, Siegel said in the directive.

“The first is to give users more control and flexibility in defining their own spam filtering and deletion settings,” he said. “The second is to reduce the increasing amount of spam processed through the campus email servers and delivered to users’ mailboxes.”

The campus email system processes more than 2 million email messages daily. Based on the scoring system, about 50 percent is spam. Another 25 percent is probably spam. Users who want to adjust their spam threshold settings can do so at [email.ucdavis.edu/secure/spamfilter.php](mailto:email.ucdavis.edu/secure/spamfilter.php).

Siegel’s directive includes specific advice for UC Davis email users, more details, and where to find help if needed.

### Geckomail to be replaced in 2007

Campus email users can look forward to more improvements this year. A plan is under way to improve email storage, so that messages will be received even faster than they are now. The venerable Web-based email system—Geckomail—is due to be replaced with a faster and more flexible program. And the electronic mailing list software—Listproc—will be replaced with the more up-to-date open-source software, Mailman.

Testing is also under way to see if the campus should move to using Cyrus, an open-source product developed by Carnegie Mellon University, to help with the email “back end.”

To learn more about the campus email system, visit [email.ucdavis.edu](mailto:email.ucdavis.edu). For other questions about email, contact your department’s technology support coordinator, or contact the IT Express Computing Help Desk at [ithelp@ucdavis.edu](mailto:ithelp@ucdavis.edu) or 530-754-4357.



### UC Davis email at-a-glance

Current number of email accounts:	49,275
Number of mailing lists on Listproc:	6,884
Average number of daily email, September 1995:	98,696
Average number of daily email, September 2006:	2,897,886
Total number of email messages, September 2006:	86,936,572
Total number of email messages tagged as spam, September 2006:	32,744,703

### Frontiers (from page 1)

not just for ‘Frontiers,’ but a central facility for all campuswide recording productions.” That could include a place where faculty, staff, students and administrators could broadcast live to national news networks on short notice.

Creating a studio like that “would quickly and dramatically enhance the reputation, authority and prestige of UC Davis as home to a stable of nationally and internationally recognized experts,” said Mitchel Benson, director of the campus News Service and the executive producer of “Frontiers.”

Ver Wey and others are working with the campus Office of Resource Management

and Planning to identify possible studio locations.

Potential cost and other details remain to be worked out.

“We are very excited about ‘Frontiers’ and our collaboration with University Communications,” Ver Wey said. “Hopefully, this is just the start of more campus ventures into webcasting and broadcast television productions.”

Meanwhile, work continues on “Frontiers” in 2007.

“We hope to get a permanent budget and continue producing more shows,” Rockwell said in mid-November. “We will produce at least seven more shows—we’ve

got seven in the bag—and hopefully more.”

Programs will air on KVIE2, an affiliate of Sacramento public TV station KVIE, plus Davis Community Television and the campus student channel ResNet. “Our emphasis is really going to be Web,” Rockwell said. “We’re looking at ways to get our news out to segmented audiences using Web sites such as Google Video. Eventually we hope to use this when UC joins iTunes.”

*For more about ‘Frontiers,’ read the Nov. 17, 2006 Dateline UC Davis article by Associate Editor Dave Jones, available at [dateline.ucdavis.edu](http://dateline.ucdavis.edu). Or visit the Frontiers Web site, [frontiers.ucdavis.edu](http://frontiers.ucdavis.edu).*



UCTV, or University of California television, airs documentaries,

faculty lectures, research symposiums and artistic performances from the 10 UC campuses, UC’s national labs and affiliated institutions.

UCTV programs are webcast live and on demand around the clock at [www.uctv.tv](http://www.uctv.tv). The service is also available on channel 9412 of Echostar Satellite’s DISH Network, and on local cable TV channels in Davis, Sacramento County and other parts of California. For information, go to [www.uctv.tv](http://www.uctv.tv).

### Mondavi Tech (from page 1)

One of the more popular enhancements is the use of “supertitles,” which allow audiences to read, in real time, translations of operas on stage. Since much of the operatic repertoire is not in English (and operatically sung opera is usually hard to understand!), this has transformed operas from being vaguely understood, overacted musical events, into true music theatre.

Similarly, many museums use technology to provide recorded commentary on exhibits, and classical concert presenters are experimenting with devices that allow audience members to read, in real time, “program notes” about pieces as they’re performed.

Since many people are unnecessarily intimidated by these art forms, it is great to have such user-friendly technology in use and in development.

### Creation

Technology increasingly has become part of the compositional palette of various artists. Through the centuries, artists have used whatever means were at hand to expand their canvas. Today’s artists are exploring our highly advanced audio and visual devices, along with all that the Web can bring.

A number of artists already use these resources to stunning effect.

For example, when John Adams, the California composer, was asked by the New York Philharmonic to write a piece in memory of those who perished in 9/11, he combined the sounds of a full orchestra with tapes of relatives reading the names of those lost. Presented in surround sound, the work has an astonishing visceral impact.

The Mondavi Center, in its short history, has welcomed new artworks involving technology. We recently presented “Super Vision,” a theatrical piece incorporating computer images with live actors. Next season, choreographer Merce Cunningham’s “Eyespace” will come to Mondavi Center, along with 500 iPod shuffles loaded with the dance piece’s score. Audience members who borrow one of these will be able to hear and see “Eyespace” completely differently than their neighbors in an arts experience that is entirely of our times, thanks to a great creative artist and a portable hard drive encased in plastic!

Technology alone does not make an art work exciting. But just as Leonardo experimented with new paints to create the Last Supper, great artists find ways to make use of the world available to them in order to enrich ours.

*Don Roth is the executive director of the Robert and Margrit Mondavi Center for the Performing Arts.*

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Layout and design by Tom Jurach.

The editor is Bill Buchanan.  
Contact him at [wrbuchanan@ucdavis.edu](mailto:wrbuchanan@ucdavis.edu)  
or (530) 754-5466 with ideas, comments, or questions.

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