High-speed system makes Ohio debut

Fiber-optic network links universities

By KIM BATES
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Bob Blumenthal will be one of the first faces appearing today during the debut of a statewide fiber-optic cable network.

The Medical College of Ohio professor will have just a minute or so to convey an important message about the system: He believes it will help the state build research teams that can attack major health problems across the world.

"This sort of thing is going to be a boon. It's really going to help," Mr. Blumenthal, a professor of medical microbiology and immunology and director of bioinformatics at MCO, said yesterday.

Ohio officials and researchers plan to gather at seven sites across Ohio this afternoon to dedicate and view the first-ever proceedings on the $19 million high-speed system, known as the Third Frontier Network, which initially will connect Ohio's universities and colleges.

Ultimately, those institutions will be linked with their business partners, Ohio's federal labs, and hospitals on what is sometime called Internet2. Area K-12 schools will be included in the system starting sometime next year as funding becomes available.

The goal is to increase collaboration among institutions, boost research, and enhance economic development. The speed of the network is hundreds of times faster than current broadband networks and allows for interactions that occur in real time across long distances.

That's a plus for researchers who plan to use the system to perform demonstrations and conduct discussions with their peers elsewhere.

"This will have a faster speed and higher resolution," said Sonia Najjar, an associate professor of pharmacology and director of the molecular basis of disease program at MCO.

The professor will also appear on the network this afternoon as she evaluates the work of her peers who are set to manipulate a medical model remotely. Ms. Najjar said the network should be beneficial to the future education of students as well.

After two years of work and the acquisition of unused private cable lines, the network's 1,600-mile backbone is currently in place in all major cities. The University of Toledo, Bowling Green State University, and MCO already have direct connections with the network, according to Dan Downing, a spokesman with the Ohio Supercomputer Center, a partner in the project.

A total of 17 colleges and universities have direct connections with the network and another 80 schools are connected to the system with leased lines, something that will change in the future, Mr. Downing said.

The network is an initiative of the Ohio Board of Regents, which has committed $19 million for the construction of the system. It plans to support the network with funding of $3 million a year, while the higher education community will support its operations with institutional membership fees.

According to the regents, the project has received a total of $7.35 million in federal funding just this year. The network is being constructed and administered by OARnet, a Columbus-based Internet service provider.

The event will begin this morning in Columbus with panel discussions at the Fisher College of Business at Ohio State University. Provost Paul Unger of Owens Community College will take part in the manufacturing panel, while Charlene Czerniak of the University of Toledo is scheduled to speak on the education panel. UT recently received a $6 million federal grant in education, and Ms. Czerniak said yesterday that she mentioned the network in her grant application.

In northwest Ohio, both the morning events and the dedication ceremony can be viewed at MCO's Health Education Building, Room 105. Gov. Bob Taft and Tom Noe, chairman of the board of regents, are expected to start the presentation in Columbus at 1 p.m., which means the system can be used for multi-discussion purposes at that point. The events can also be observed at www.osc.edu/oarnet/tfn.

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