

## **Spectrum**

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### **Board approves new academic programs**

The UM Board of Curators voted Oct. 24 to establish three new degree programs at the UM-Columbia campus, subject to approval by the Coordinating Board for Higher Education. A master of science in computer engineering is planned by the College of Engineering, to be offered starting in fall 1997, and a new computer science and engineering department is to be created in the College of Engineering. A Ph.D. program in computer engineering and computer science would also be created.

"These proposed programs will enable us to take the best and the brightest students from across the country and throughout Missouri and put them in a situation where they can contribute to the development of computer engineering and computer science at the Ph.D. level," said Harry Tyrer, interim chairman of the computer engineering and computer science department.

The Board also voted to approve the creation of a master's degree in religious studies, in cooperation with Washington University in St. Louis, to begin fall semester 1997, also subject to CBHE approval.

### **Finalists for president to be identified soon**

Curator Adam Fischer, chair of the University Presidential Succession Committee, told the Board at its October meeting that the committee is in the early stages of screening nominees for UM president. Board President Fred Hall reported that the committee expects to narrow the field of candidates down to 12 to 15 in November.

The committee will then request reactions from the Intercampus Faculty Council and reduce the list to three to five names by early next year. The search committee hopes to select a university president between January and March 1997.

### ***Missourian* agreement made**

The Board also approved a proposal to clarify the relationship between the University and the *Missourian* Publishing Association, which publishes the *Columbia Missourian*. The decision will help fund teaching costs previously absorbed by the newspaper and specifies a policy allowing editorial independence.

## **Curators OK \$100 million bond sale to upgrade Health Sciences Center**

The University of Missouri System Board of Curators unanimously approved the sale of \$100 million in bonds to finance improvements at UM-Columbia's Health Sciences Center during the next five years. At the same time the Board approved the sale of an additional \$38 million in bonds to be used to retire old debt. The resulting savings will be nearly \$2 million in interest paid over the life of the bonds. The present value of the savings will be about \$1.3 million.

The board authorized the sale of the bonds at its meeting Oct. 24 in Columbia. The board's Executive Committee will execute the sale of the bonds at a meeting in mid-November.

The bond issue is a crucial step toward the University's goal of investing more than \$211 million in improvements and acquisitions designed to ensure that the Health Sciences Center remains competitive in the expanding managed-care market. The estimated price tag during the next five years is:

- \$69.1 million for facilities, including
  - \$51.5 million for the critical care addition,
  - \$15.5 million for the ambulatory care building and
  - \$2.1 million in renovations for the Rusk Rehabilitation Center;
- \$50 million for equipment replacement, at a rate of \$10 million per year;
- \$27.5 million for improved information systems;
- \$16.5 million to build a primary care network; and
- \$48.4 million to establish delivery network partnerships.

The board also reviewed progress on a study of the Health Sciences Center's business plan. Curators had earlier hired APM Inc., a Chicago-based consulting firm, to review hospital planning and business strategy.

APM's conclusions thus far support the University's goal of becoming an independent consolidator of Mid-Missouri health systems rather than standing pat or seeking a partnership with another company. The preliminary report by the firm outlined four broad objectives:

1. The hospital's highest priority should be "the expansion of primary care services and the development of a comprehensive set of services."
2. The hospital must consider development of a dedicated revenue source for teaching and research costs, careful review of the funding flowing from the hospital to support non-clinical purposes, and reduction in the costs of delivering care.
3. To achieve optimal performance, the hospital must organize to translate strategy to action and successfully integrate the various components of the health-care delivery system.
4. To ensure high-quality patient care, the hospital must develop operational standards supported by an integrated information system.

The firm urged the University to act quickly to ensure that the number of mid-Missourians served by the Health Sciences Center increase substantially, predicting that managed-care market penetration in the area will increase from the present 10 percent to 30 percent by the year 2000.

## **Board resolution formally thanks Lauries for gift**

The Board Oct. 25 unanimously approved a resolution commending Columbians Bill, Nancy and Paige Laurie, who donated \$10 million toward the construction of a new basketball arena at MU. Curators praised the family for making the "largest private gift in Mizzou history to set a new standard in philanthropy."

The resolution also directs University administration to develop a funding plan for the MU Sports Park, to offer state-of-the-art facilities for basketball, football and other athletic activities.

The Board approved hiring the firm of Ellerbe Becket, Inc., of Kansas City, for design services related to the basketball arena.

The firm will evaluate architecture alternatives including a bowl design for the new building, expected to provide as many as 17,000 seats. The architects also will consider requirements for luxury box seating. Ellerbe Becket is the architect for three other MU athletic department projects to be completed by July 1998, and was the designer of the innovative Kiel Center in St. Louis.

## **CQI programs aimed at enhancing UM processes**

The relentless pursuit of perfection. To many it may seem like a daunting goal, but not to Bonnie Bourne. She is the indefatigable force behind the University of Missouri's drive to achieve continuous quality improvement (CQI) a.k.a. total quality management. The UM System officially jumped on the CQI bandwagon approximately five years ago when the Board of Curators encouraged it, the chancellors endorsed it and Executive Vice President Jim McGill assigned a member of his staff to lead the effort. He later hired Bourne to oversee a comprehensive program to improve quality and accessibility by enhancing cooperation both within and across the campuses. Bourne splits her time between University Hall and Jesse Hall, where she also serves as a consultant to Interim Chancellor Richard Wallace and directs the UM-Columbia CQI programs.

The concept of quality improvement was first introduced by W. Edwards Deming, the renowned consultant perhaps best known for his work in Japan, where starting in 1950 he taught top corporate executives and engineers methods for the management of quality. The war-battered Japanese took an interest in his statistical methods, which eliminate inspection and emphasize quality as the responsibility of all workers. His teachings are credited with dramatically altering the economy of Japan.

"To prepare the University to do business in the twenty-first century, we need to collaborate more across all our boundaries," said Bourne. "Higher education is now, more than ever, a competitive environment. It calls for doing business differently more efficiently."

Bourne earned a doctorate in education from MU and has worked as a family counselor an experience she has found helpful in her current assignment. "Just as families have dysfunctions, organizations have to look at what is counter-productive."

At the UM System level, six quality improvement teams have been appointed by the University's top management, endorsed by the Administrative Management Council (administrative vice chancellors on each campus), then-President George Russell, Interim President Mel George and the Board of Curators. The six CQI teams were appointed to examine and re-engineer the way the UM System administers the following: cash receipts; data warehouse; electronic approval; handling of attachments, access and storage of electronic data; journal entries; and travel.

The first system-wide CQI team to complete its assignment the Cash Receipts Re-engineering Project Team was recently nominated for a Missouri Quality Award in the educational division in the mid-Missouri region. The cash receipts team was chosen for emphasis because it represented an opportunity to fulfill the University's goals of inter-campus collaboration and improved technology use first identified in President Emeritus Russell's five-year plan. The goal of the cash receipts team was to improve the accuracy and efficiency of the cash receipts process, from the receipt of money to the reconciliation of bank and books.

A central objective of UM CQI programs, Bourne says, is to use technology to enhance academic and support services. The CQI philosophy for using technology focuses first on examining and streamlining a process before purchasing hardware or software. To get the best fit, Bourne said, "Our approach is to simplify a process before we electrify it."

Other benefits to the University from CQI programs include improvement in operational efficiency resulting in cost savings, better control over assets and the protection of the institutions's public image through sound fiscal management. "It's important to remember, from planning to public relations, we are public stewards," Bourne said.

To accomplish these goals, Bourne works with CQI teams to initiate a culture of change, which is not always easy, especially in a large organization with a long history of doing things a certain way. The first step is to involve the people who know the system best, she said.

"Teamwork is critical to our success," she said. The cash receipts team was formed from representatives of all people who touch that process cashiers, accountants, investment banking staff and information technology representatives. Members include Bourne, Susan Burns, Holly Bush, Bill Saracini, Barb Harris, Deborah Harvey, Mary Ann Nyman, Marilyn Parry, Bob Rahner, Janet Robertson, Tom Sadowski, Dave Smarr, Randy Vogan, Angie Wilcoxson and Carol Wright.

The CQI method then asks the team to focus on quality as defined by customers of the process both internal and external and their expectations. Next the team utilizes a "systems thinking" approach, which evaluates both the current and proposed system. Finally, the team analyzes data to determine whether the objectives of the program were achieved.

The cash receipts team re-engineering was successful, Bourne said. As a result, there is higher customer satisfaction, more administrative efficiencies with resources and better control and accountability. Team leader Dave Smarr, assistant controller, services, said that "...the re-engineering of the cash receipts process has ushered in several 'new age' methods for major business functions at the University, which we hope will ripple through other major University processes. We first question all procedures on a cost/benefit basis, retain only the essential, and then apply the power of networked desktop technology to expedite the steps that remain. We are seeing a vast improvement in the processing time for cash receipts as people are enabled to work more efficiently."

### **Mel George gives preliminary report on planning**

In his first presentation to the Board as interim president, Melvin George made a preliminary report Oct. 24 on his analysis of the University's planning process. He said University general officers will complete the five-year plan at the end of this fiscal year and also will be working to identify additional areas that need attention in future plans.

"We believe that all of these activities will result in a package of recommendations and options for you and the new president this spring that will enable the University to continue and accelerate the significant progress it has made during the past few years," he said.

"My task during the next few months is to bring to the Board an assessment of the extent to which the five-year plan will have been completed by next June 30, and to move forward as aggressively as possible in the general directions already established by the board in its seven planning goals adopted in December 1995."

He said he expects to present recommended options for specific goals to the Board in March 1997, but competitive compensation based on the quality of programs, individual merit and length of service, will continue to be a priority.

The campuses also will continue to provide adequate infrastructure for faculty to develop high quality academic programs, he said.

"I am asking for an assessment, campus by campus as well as system-wide, of patterns of equipment expenditures and for areas of deficiency in academic infrastructure in order that we may set some appropriate priorities for future planning." He said the recommended new goal is to streamline and make more efficient and user-friendly business and service processes and systems that support academic missions.

In the area of repair and maintenance, George said he has asked the chancellors to evaluate by March whether it is possible to budget an additional 2 percent of replacement value to fund future renovations and rehabilitations.

Other goals George is continuing to evaluate are to:

- Increase competitive extramural funding for research and scholarship;
- Assist the state of Missouri in the creation of an advanced telecommunications network for the delivery of educational programs, health care assistance and the sharing of resources;
- Focus the University's unique expertise on Missouri's needs for objective policy analysis;
- Develop a comprehensive University-wide plan for health care education, research and services.

**Correction:**

The August 1996 issue of *Spectrum* incorrectly reported that UM-Rolla is a participant in a proposed cooperative Ed.D. program in educational leadership along with UM-Columbia, UM-Kansas City, and the regional universities in Missouri. UM-St. Louis is actually the third UM campus involved in the cooperative program.