

CBHE recommends \$202.2 million for 84-85

The Missouri Coordinating Board for Higher Education will recommend to the governor and the legislature that the University of Missouri receive \$202.2 million for general operations in 1984-85. The Board of Curators had requested \$206.4 million.

The CBHE announced its recommendation at an Oct. 28 meeting in St. Louis.

The CBHE recommended \$17.2 million for the UM-Columbia Hospital and Clinics—\$3 million more than requested by UM—to cover anticipated costs of changes in reimbursement from Medicare, Medicaid and other third-party payers and the increasing burden of caring for indigent patients and patients cared for on behalf of the state.

The 1983-84 state appropriation was \$167.3 million.

A summary of UM's requests and the CBHE recommendation follows:

	UM's request	CBHE recommendation
UM General Operations	\$206,418,852	\$202,216,382
Hospital and Clinics	\$ 14,050,714	\$ 17,226,033
Missouri Institute of Psychiatry	\$ 2,066,091	\$ 1,960,825
Missouri Kidney Program	\$ 3,737,170	\$ 3,730,463
State Historical Society	\$ 554,320	\$ 468,312
Missouri Fire and Rescue Training Institute	\$ 76,516	\$ 74,204
Higher Education Research Fund	\$ 1,000,000	\$ 1,000,000

Substance licensed by UM makes brain imaging possible

A new radiopharmaceutical that should mean easier diagnosis of many medical conditions, especially those involving the brain, has been licensed by the University of Missouri to Amersham International, a British-based company. The firm specializes in radiochemicals for health care and life-sciences research products.

The substance, propylene amine oxime/technetium-99m, is the product of several years of work by researchers on the UM-Columbia campus. The University will receive royalties based on sales of products made from the new substance or its derivatives. Royalties are 5 percent for sales up to \$2 million, 4½ percent for sales from \$2-4 million and 4 percent for sales of more than \$4 million.

Easily produced technetium is widely used to create medical images of the heart, liver, thyroid and other organs, but until now it was not suitable for imaging the brain. David Troutner, UMC professor of chemistry, and Wynn Volkert, professor of radiology and biochemistry at the UMC School of Medicine, along with Richard Holmes, professor of radiology and medicine, and R. Kent Murmann, professor of chemistry, found that combining technetium with propylene amine oxime (PnAO) yielded a substance that readily passes through the body's blood-brain barrier. The barrier prevents most foreign substances from entering the brain.

Inside the body the technetium gives off radiation that is recorded by special imaging equipment. The result is an X-ray-like picture of blood flow inside the brain. Such images should prove very useful in the diagnosis and treatment of stroke, head injuries and other problems involving the brain.

Stroke and seizure disorders, for example, usually produce regional blood flow alterations that are readily apparent with the use of imaging equipment. Likewise, the influence of various drugs on circulation abnormalities can be monitored with the aid of blood flow

imaging.

Such images may be more useful than CAT scans in some cases. Work elsewhere has shown that some patients have nearly normal CAT scans shortly after a stroke. Blood flow images, however, immediately reveal clear evidence of stroke.

Current methods of imaging blood flow in the brain are not only extremely expensive, but are available in only a handful of locations. Potentially, PnAO/technetium could make such blood flow images widely available and considerably less costly.

In addition to securing rights to the new compound and its derivatives, Amersham International will fund continued research at UMC. Troutner will receive some \$100,000 during the next three years to further investigate the fundamental chemistry of the substance, while Holmes and Volkert will receive approximately \$182,000 to evaluate the potential of PnAO/technetium and its derivatives as radiopharmaceuticals for human use.

Insurance option available till Dec. 1

Employees and retirees who want to participate in the newly created medical insurance option that allows for lower premiums in exchange for a higher deductible must sign up for the program by Dec. 1.

Those insured may choose between the present deductible plan of \$100 or choose the new \$500 deductible plan. The University's cost remains the same for both plans, but employees and retirees may save from \$10.34 to \$26.48, depending on classification of the person insured and the number of participants per family.

Unless employees ask to be placed under the \$500 deductible plan, they will be enrolled in the \$100 deductible plan. Future changes will be allowed only on Jan. 1 of each year. Any future change from the \$500

Research Assistance Act, private donors fund projects

Eight research projects focusing \$909,477 on studies that have potential economic benefits for Missouri are now under way on the four campuses of the University of Missouri, funded by the Missouri Research Assistance Act and private sources.

State support totals \$279,235 and private support \$630,242. Additional state funds are allocated as private support is obtained.

The Missouri Research Assistance Act was enacted in 1982 to help fund research projects that enhance employment opportunities, stimulate economic development and encourage private investment.

Under terms of the act, state funds will provide no more than one-third of a research project's cost, with at least two-thirds to be funded from non-state and non-federal sources as arranged by the researchers. The state appropriated \$950,000 in state funds for the program for the 1982-83 fiscal year.

The projects under way at the University were recommended by the University's Research Assistance Act Steering Committee to University President James C. Olson and approved by the University's Board of Curators for state funding in March. All of the projects received both University and outside evaluation as required by state law.

New competition begins

Preproposals for research or applied projects eligible for Missouri Research Assistance Act funding will be accepted through Jan. 27, announces Melvin D. George, UM vice president.

The University's Research Assistance Act Steering Committee, chaired by UMKC Chancellor George Russell, will review the preproposals in February, and full proposals for projects chosen by the committee for further review will be due in late April.

Before submitting a preproposal, investigators are encouraged to consult potential sources of external matching funds. Complete guidelines and selection criteria are available from chancellors on each campus.

Following is a listing of Research Assistance Act projects under way, the principal investigators and their campus, Research Assistance Act funding, outside sponsors and the amount of their contribution (as supplied by the Office of Research Program Services):

- "Automatic Classification of Ground Targets from Synthetic Aperture Radar

Images," Gordon Carlson, UM-Rolla; \$30,249 from Research Assistance Act (RAA) funds and \$89,240 from McDonnell-Douglas.

- "A Study of the Interface Between a High Order Microprocessor Language and Flight Control," Paul Stigall, UMR; \$16,158 from RAA and \$61,158 from McDonnell Aircraft.

- "Quantitative High Resolution Chromatography in Molecular Biology and Biomedical Applications," Charles Gehrke, UM-Columbia; \$26,000 from RAA, \$42,675 from Marion Laboratories and \$12,000 from Supelco.

- "Increased Agricultural Productivity Through Soybean Double Cropping," Z.R. Helsel, UMC; \$17,413 from RAA, \$23,827 from Missouri Soybean Merchandising Council, \$6,000 from Foundation for Agronomy Research and \$5,000 from Pioneer Hy-Bred International Inc.

- "The Establishment of a Joint MDC/UMR Signal Processing Laboratory," Hardy J. Pottinger, UMR; \$105,203 from RAA and \$210,406 from McDonnell Douglas Foundation.

- "Development and Application of Genetic Engineering," Ronald McQuarrie and Rona Hirschberg, UM-Kansas City; \$65,000 from RAA and \$130,000 from Victor E. Speas Foundation.

- "Development and Evaluation of Image/Processing Pattern Recognition Algorithms for Defense Applications," Norman R. Cox and Randy H. Moss, UMR; \$14,212 RAA and \$39,936 from McDonnell-Douglas.

- "Establishment of the UMSL Business Data Base and Information Service," L. Douglas Smith, UM-St. Louis; \$5,000 from RAA, \$4,000 from The Williams Companies, \$3,000 from Shelter Insurance and \$3,000 from Continental Telephone Co.

Long-range planning meetings

The next campus and extension liaison long-range planning committee meetings, and the critical issues to be discussed, are:

UMC—Nov. 17 (programs and services and comparative advantage)

UMR—Nov. 21 (programs and services and comparative advantage)

UMSL—(met Nov. 9 to discuss programs and services and comparative advantage)

Extension—Nov. 18 (programs and services and comparative advantage)

The Board of Curators Long-range Planning Steering Committee is meeting today and tomorrow (Nov. 10-11) to discuss the issues of clientele and goals and objectives.

Curators confirmed

The UM system Board of Curators' newest members—James S. Anderson of Springfield and Charles E. Kruse of Dexter—were confirmed by the Senate during this fall's special session of the Missouri General Assembly.

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Benefactress visits

Shortly before her death in San Antonio, Amy Shelton McNutt visited the UM-Rolla campus to participate in a ceremony designating the proposed mineral engineering building as Vachel H. McNutt Hall, named after her husband, a successful petroleum geologist who died in 1936.

She is pictured at left during her Oct. 4 visit, in which she credited the education her husband received at UMR as enabling him to identify potash-bearing deposits in 1925, the first found in the Western Hemisphere. Mrs. McNutt, who was 94 when she died, is shown here meeting Martha E. Nussbaum, a junior in the geology department at UMR and recipient of a McNutt scholarship.

Mrs. McNutt received UMR's first honorary degree of doctor of humane letters, in 1964. She was an honorary Knight of St. Patrick, a member of UMR's Order of the Golden Shillelagh and a recipient of alumni and other awards.

Her husband taught at UMR after receiving an M.S. degree there in 1912. In 1961, Mrs. McNutt established the V. H. McNutt Foundation at UMR, naming the Department of Geology and Geophysics as beneficiary. "Momma Mac," as she was called, took a personal interest in each of the 500-plus scholarship recipients named through the years.

Plan allows fee prepayment

The Board of Curators has authorized the University to establish procedures allowing it to accept prepayment of tuition, student fees and room and board charges.

A prepayment plan will provide a convenience for parents of students planning to attend UM. They will have the option of paying for college fees in advance on a monthly basis to a private company rather than paying the University in a lump sum at the start of a semester. The company will transfer the funds to the University.

The board's action allows the University to accept proposals from firms for this service and to enter into agreements to accept prepayment of tuition, incidental and other fees.

"The plan could give us a marketing advantage. If parents and students are trying to decide between the University of Missouri and another institution, the prepayment plan could be a drawing card," says Kenneth Hutchinson, assistant vice president for personnel staff relations.

UM grants tallied

Nearly \$20 million in grants from federal, state, business, industry and other private sources was received by the University of Missouri in June, July and August.

A breakdown by campus shows the distribution of the grants: UMC, 198 grants, \$13,120,014; UMR, 50 grants, \$2,739,286; UMSL, 33 grants, \$1,415,147; UMKC, 26 grants, \$1,553,338; and UMca, eight grants, \$224,289. The total is 315 grants and \$19,052,074.

In June, 31 percent of the grants were for research and 24 percent for instructional programs. In July, 21 percent were for research and 20 percent for instruction. In August, 58 percent of the funds were for research and 24 percent for instructional programs.

Student aid programs accounted for a large share of July grants.

Macon County farm bequeathed to UM

A 416-acre farm in Macon County has been bequeathed to the University of Missouri by Bertha M. Brown.

Under terms of the Brown will, dated July 19, 1968, income from the farm is to be used to establish a memorial fund in memory of Brown's late father, George G. Brown.

A renter now on the farm will be allowed to remain under terms of the will. When it becomes available to the University, the land is to be used for agricultural experiment purposes for 25 years. If the land is sold at some future date, proceeds will go to the George G. Brown Memorial Fund, which is to be used to finance agricultural experimentation.

English professor to give Weldon Spring lecture

The fifth and final lecture of the 1983 Weldon Spring Humanities Seminar will be presented by Linda Voigts, UM-Kansas City associate professor of English.

Voigts will give the lecture Nov. 17 at 2 p.m. in the McDonnell Conference Room (SSB 331) on the UM-St. Louis campus. The title of her lecture is "The Scientific and Medical Manuscripts of 15th Century England: What They Tell Us."

The other scholars who participated in the 1983 Weldon Spring Humanities Seminar are John Foley, UM-Columbia; W. Nicholas Knight, UM-Rolla; William Ashworth, UM-Kansas City; and Roland A. Champagne, UM-St. Louis, chairman of the seminar.

Discounts set for bulk mail using longer zip codes

University of Missouri departments and offices that have outgoing mail in bulk may benefit from the U.S. Postal Service's new "Zip + 4" program, which will speed the automated sorting of mail.

Bulk mailers can benefit financially, since the Postal Service Board of Governors last month approved special rate incentives to go along with the nine-digit zip codes.

Rate incentives will affect only first-class, letter-size mail (3½ to 6¼ inches high and 5 to 11½ inches long), including post cards, mailed in bulk.

Bulk mailers may request the Postal Service's computer tapes to convert their mailing lists. The complete national directory tapes or tapes of one or more states can be requested by contacting the local postmaster.

Bulk mailings of 500 or more pieces of first-class, letter-size mail pre-sorted by the first three or the first five digits will receive a half-cent discount per piece in addition to current bulk mailing discounts. Mailings of 250 or more pieces that are not pre-sorted will receive a .9 cent discount per piece.

Vic Whitaker, address information systems administrator for the Columbia management sectional center of the postal service, says the St. Louis and Kansas City sectional centers have equipment in place for automated sorting by nine digits, and the Columbia sectional center is scheduled to have equipment in operation sometime during 1985.

Mailers who qualify for price discounts should work with customer service representatives in their local post office to meet require-

ments set by the postal service for ensuring mail is readable by the automated equipment.

After a mailing is prepared, postage that takes into account the proper discount may be affixed to the mail and presented to the postal service with Form 3602, a statement of mailing.

The Zip + 4 program, targeted to businesses that have large mailings, began Oct. 1, Whitaker says, after Congress postponed its effective date from 1979. Many volume mail users had been waiting to see what rate incentives would become available before adapting their mail systems to the program. Now that the rate incentives have been approved, Whitaker says, the postal service expects the Zip + 4 program to be popular among large businesses.

Jobs

The following administrative/professional and academic vacancies were listed with *Spectrum* as of Nov. 4. Anyone interested in a position should contact the appropriate department or personnel office.

UMC: assoc./full professor, medicine, and director, pulmonary diseases; research associate, medicine, engineering experiment station, microbiology; asst. professor, animal sciences, medicine (2), business administration, radiology, child health (3), geology (2), entomology, history, marketing (2), philosophy, romance languages (Spanish); professor and director, social work; asst./assoc. professor, agricultural engineering, finance,

child health, medicine (3), surgery; asst./assoc./full professor, industrial engineering, veterinary microbiology, ophthalmology; assoc./full professor, pathology, psychology; postdoctoral fellowship (4), psychiatry; assoc. professor, history; instructor, continuing medical education, extension education; research asst. professor, physiology/Dalton Research Center; extension associate, plant pathology; instructor/asst./assoc./full professor, nursing; instructor/asst. professor, nursing; asst. dean for undergraduate program, nursing; librarian II or III; administrative assoc. I; asst. editor; asst. manager, KOMU production operations; executive staff asst; research scientist; food service supervisor I; staff physician; asst. supervisor, custodial services; research specialist.

UMC Hospital: administrative nurse I; clinical nurse I; computer project manager; manager, occupational therapy; nurse anesthetist; occupational therapist; staff chaplain; sr. systems programmer; computer programmer/analyst II; pharmacist; assoc. administrator; laboratory manager; learning skills specialist.

UMKC: grader, business and public

administration; research assistant, biology, chemistry, UMKC Institute; professor, banking; director, computer science programs; asst./assoc. professor, accountancy, chemistry, X-ray dentistry, computer science (3), operative dentistry (2), orthodontics, prosthodontics; visiting professor, theatre; adjunct faculty, biology; research associate, Vice Chancellor for Academic Affairs, biology; assoc./full professor, direct marketing; instructor, communication studies; coach, tennis; senior research assistant, UMKC Institute; theatre assistants, Professional Repertory Theatre.

UMR: asst./assoc./full professor, geology/geophysics, geological engineering; lecturer, music, art; asst. professor, mathematics, speech and media studies; asst./assoc. professor, ceramic engineering; assoc. professor, engineering management; assoc. research engineer, chemistry.

UMSL: secretary to the chancellor; asst./assoc./full professor, accounting, management science and information systems; asst. professor, marketing, political science (2), mass communications; postdoctoral fellow, biology.

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